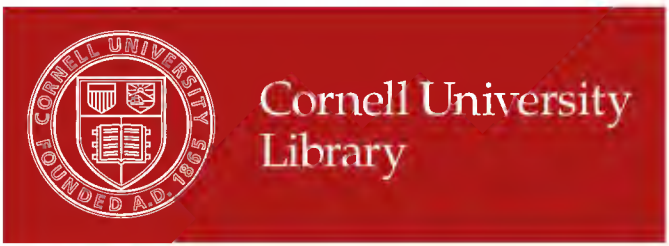
THE COST OF LIVING

AS INFLUENCED BY SANITARY SCIENCE

ELLEN H. RICHARDS



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THE COST OF LIVING

AS MODIFIED BY

SANITARY SCIENCE.

BY

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PREFACE TO THE SECOND EDITION.

WHILE appreciating the many kind words vouchsafed by the reviews in regard to this little book, the author began to feel somewhat disheartened as to the chief purpose of the work. The broad view of sanitary science, that it means a knowledge of all that physical and mental environment which leads to the highest utilization of man's powers for the progress of civilization, and not a mere study of germ diseases, seems to be lacking even in the educational world.

It was especially gratifying, therefore, to find that the meaning was not so blindly expressed but that it could be read, and the author desires to thank the unknown critic who so clearly expressed the purpose of the discussion that the quotation is here given in full.

"The 'Cost of Living' represents a departure from former methods of teaching hygiene. The teaching of hygiene as a natural science has not accomplished what was prophesied for it two decades since. The sanitarian is beginning now to treat hygiene as one phase of a social science. To that end the author of the book under discussion presents nine lectures on domestic economy. Starting with the assumption that half our income is wasted, or, in other words,

that present incomes go only half as far as they might, the author concludes that reform may be effected through improvement in consumption as well as through an increased share in the results of production. In fact, permanent improvements in the standard of life depend rather upon wise spending than upon large earnings.

"Sanitary Science furnishes the criterion of wise expenditure in the selection of a diet, of a building site, and household furnishings. The lectures go further and suggest model budgets for the households dependent upon modest incomes. Many economies are discussed whereby the small incomes may be made to raise materially the standard of life, without subtracting any real or supposed essentials in the existing standard." (Annals of the Am. Acad., May 1900, p. 448.)

In regard to the Division of the Income necessary or best adapted to produce the desired result, not until more actual budgets from different parts of the country and from families living under a variety of conditions are received can general laws be deduced. From the young people who have numbered this little book among their wedding presents, and from those who have started housekeeping with its suggestions in mind, will come the most valuable criticisms.

The author will be grateful for these and for any suggestions which will help those who are finding more and more difficult the struggle for a civilized life.

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CHAPTER I.

STANDARDS OF LIVING.

"Apart from religion, the end of man is to secure a plenty of the good things of this world, with life, health, and peace to enjoy them."—JOHN LOCKE, 1690.

"Education is that organizing of resources in the human being, of powers and conduct, which shall fit him to his social and physical world."—WILLIAM JAMES, 1899.

IN these days of consolidation for the purpose of cutting down expenses, days of close calculation of cost, when everything is reduced to a money basis in production, it is not surprising that discussion should have arisen over the great waste involved in the keeping up of fifty kitchen-fires to do the work that five would do; in the time given to the marketing for one family which might serve for fifty. Many students of social questions have predicted the speedy appearance of a housekeeping trust, by which

living is to be made more economical and less burdensome.

It must be acknowledged that for economy the home of the well-to-do cannot at present compete with the best-managed hotels and boarding-houses. It is worth while to examine the causes for this state of things and to be prepared to accept such modifications as are inevitable.

In the first place, a family in boarding occupies one half or one third the space it would require in a house of its own. That means less rent.

In the second place, most persons will put up with less service in such quarters than they would expect at home.

In the third place, the cost of the food, its preparation and serving, is far less per person than in a small family.

In the fourth place, the economy of time in having most of the details of the daily routine cared for without personal oversight and direction reconciles many persons to the hotel and boarding-house life.

While we acknowledge the attractive side of the care-free condition of the members of the "Home trust," I think we also look forward with a secret dread to the time when we may realize a Bellamy dining-room or a Wells nursery.

It is with the intention of starting a discussion of certain questions by the intelligent young people

just about to begin life on fifteen hundred to three thousand dollars a year that these pages have been written.

Much investigation has been made of cost of existence of those who earn four hundred to five hundred dollars a year, and many accounts have been given of those who spend ten thousand to fifty thousand dollars a year on the family living, but the majority of the most intelligent American families, students, professors, business men, and professional men, are obliged to do the best they can on from two thousand to five thousand dollars a year. It is from this class that we may most confidently expect a great advance in the next generation in a knowledge of how to make the best use of life and how to get the greatest pleasure from the money expended.

The discussions which have called public attention to the status of housekeeping have assumed the problem to be one of *economics*, brought about by the industrial situation, and have looked for the solution along purely material lines. This is to consider the human being as a machine, as a passive object of revolutionary action, without power to direct his own destiny.

It has been said: "Natural progress and physical and intellectual advancement are not the whole of human progress. The real advancement of the race is to be promoted by the cultivation of our emotional

and æsthetic nature, and altruism must replace egoism."

While granting the presence of the economic and industrial factors, the author holds that the ethical discussion must precede any attempt to adjust these factors to the ideals of the twentieth century.

Man as an uplifting, compelling force in the world does not live by bread alone, but in all ages has won his place by the ideals he has placed far ahead and above him and for which he has valiantly striven. The man without a conscious aim slowly but surely degenerates.

The Englishman's house is not only his castle, it is a small world in itself; in its management he has learned to rule larger things: and it is conceded by so able an observer as Edmond Demolin that this is the secret of Anglo-Saxon superiority. The Englishman easily leads because he has organizing ability. The young boy who by his father's death becomes the head of the household, develops those qualities which afterward show in statesmanship or in generalship or in engineering professions.

When these daily affairs are conducted on principle, the experience gained in this small world of human interests is the best preparation for the larger world of charity and of public work.

If we accept the conclusion of the thoughtful students of human evolution and assume that what is

represented by the term "home" is the germ of Anglo-Saxon civilization, the unit of social progress; that no community rises above the average of its individual homes in intelligence, courage, honesty, industry, thrift, patriotism, or any other individual or civic virtue; that the home is the nursery of the citizen; that nothing which church, school, or state can do will quite make up for the lack in the home, then we must acknowledge that no subject can be of greater importance than a discussion of the standards involved in home life.

A clever writer has shown how often the family is a mere unorganized herd, with as little regard for individual rights, for privacy, for likes and dislikes, as is shown by any crowd. Whenever this is the case it is because of wrong standards. A home means a place that one can call one's own, into which no one else can intrude. Each child, each member of the family should have a room, or at least a screened corner where safety from interference may be counted upon. Even a chalk-line on the floor contented the two who were obliged to live in one room in the old ladies' home.* Quiet hours have a great influence in the development of character. A love of the crowd betrays a poverty of individual resources. The constant presence of the nurse is,

* "Castles in Spain," by Alice Brown.

after a certain age, bad for the child; the constant direction to do this or that stultifies it.

Independence of character, personal resourcefulness, is what is at present needed in the social world; it is what the evolution of the past three or four centuries has been cultivating in the development of the individual, in freeing him from despotism and tyranny, but it has been done within the home. Is the office of this nursery of character gone? Do we not see signs of decadence in strength of purpose, in that which goes to make for the best citizenship as the power of the home wanes?

Is it not time to ask ourselves "What is life for?" "What is the office of the home?" Is not the purpose of the family *education* in all that makes for character, for citizenship; are not all the qualities that serve the highest purposes in the world developed in the family life when it is taken seriously?

We admit that the very existence of the individual home cannot be justified on ordinary economic grounds. Trusts and combinations have wonderfully cheapened the common articles in daily use. A nursery trust would as wonderfully lessen the cost of raising children. Mr. H. G. Wells* has given us a vivid picture of such a nursery where one maid may replace ten.

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*"When the Sleeper Wakes."

The same economic tendency is going on in the public schools. They are doing by the wholesale much of what the home did individually fifty years ago, and it must be acknowledged that on the surface they are doing it more cheaply because large classes are taught at once, but there is less opportunity for individual development, and if this tendency is to increase and finally all men are to be placed on one level with no special individuality, where are the *leaders* of the next century to come from ?

The school has its place as a corrective of the deficiencies of the home. At any given time the leaders of education should be able to foresee the needs of the future citizen, and by the school training to influence quickly a whole generation. It is this ready adaptability to changing conditions which makes the school such a potent factor whenever it is allowed to use its preventive power in " doing away with the inconvenience of ignorance," as John Eliot expressed it. Conservatism has always opposed, and is to-day opposing, the economic tendencies of the school. The early struggle came in 1817, when it was proposed to teach reading in the school instead of requiring it for admission. Each new departure has been fought on the same ground—that training of all but the purely intellectual faculties was the business of the home, and that the school was usurping its duties. The same battle is now going on over the

still more evident home occupations, cooking and sewing, but, as in 1817, when reading was *not* taught in the home, so now when cooking and sewing are *not* taught by the mother, the school must prepare the next generation to bring these arts back or to teach it the means of doing without them.

The union of several persons in a group having a common end, the welfare of the family, leads to a consideration of others, to suppression of gross selfishness, and offers a stimulus to that industry which will advance the common interest. Human life is so short and human endeavor so weak that the incentive to provide for his own personal future would not be sufficient to urge to the full capacity any man's power. For his child, his grandchild, he will strive and thus gain the reward that comes with striving; for it is not the *possession* of a given thing which yields the most satisfaction; it is the contest which precedes possession.

Our premises are, then, that the individual family group must be maintained, but in a manner consistent with modern progress. It is the *ideal* which is to be preserved, not the mere shell.

At first sight what could be more unlike the dainty, gauze-winged butterfly, dancing at will in the sunlight, than the slow-creeping, clumsy and often repulsive caterpillar or the hard-shelled chrysalis buried in the ground or idly swinging from a twig?

And yet each form is only a stage in the life-history of the same organism.

The form of home life familiar in the early part of the nineteenth century, in which all industries were carried on under the collection of roofs called the homestead, and in which each member of the family contributed, by the daily work of his or her hands, to the stock of linen, wool, implements, etc., which have been handed down even until now, may be likened to the caterpillar stage with its many feet, all contributing to the forward movement. The present condition may be considered the chrysalis stage, in which the useless feet are being absorbed and the internal organs, even, are being transformed to suit new uses not yet recognized.

Home life at the close of the nineteenth century has lost nearly all the industries it once possessed; it is no longer the progressive element in society; it no longer devours voraciously whatever offers in the way of stimulus and development; it is stationary or even retrograding in many ways. The family "resides" now here, now there; they hire a "place," and the children, instead of adding each day some improvement, hack the trees, if there are any, bang the furniture, tear the paper, and dig up the walk. No care or responsibility for property or for the future seems to rest upon parents or children. So far has this gone that owners of property recognize it and

either refuse to rent to families where there are children or charge a correspondingly higher rent.

What a commentary on the decadence of the ideal of home life, and what a pitiful picture of the moral degradation which has gone with it! It is destruction in the shortest possible time, not construction, bit by bit, of that which is to last.

The century-long struggle for personal freedom has invaded the home. The father feels no care for the child beyond paying the bills. The mother's responsibility ends with food and clothes. Education is left to the school, and manners to the street. In the rented house there is little sense of possession; frequent movings render clothes more important than furniture, and cause books and pictures to be looked upon as troublesome. It is easier to move than to clean house. The result is social ferment and discontent and family discord.

Housekeeping has become a burden and not a delight; every dollar spent on the home is grudged; the responsibilities of keeping up a separate family abode are more and more irksome and are readily thrown off; the time and money so saved are frequently spent in communal pleasure rather than in individual development. This is a serious phase in American social life and deserves the attention of all thoughtful persons, especially since it is doubtful if "health and peace" are increased by the so-called improvements.

"Man advances when his comforts keep pace with his intelligence."

It is customary to lay the blame on economic conditions and on them alone, but the whole trouble lies in the lack of ideals and standards which should control even social tendencies. Habits of life have been allowed to lapse into those of savagery where the present only guides action.

There are many elements entering into the formation of the required standards. At present the discussion will be limited to the influence of sanitary knowledge and ideals upon the economic considerations which are too apt to be unduly emphasized. This is only applying to home life the principles governing public health.

It is more economical, from a money point of view, to discharge all wastes into the stream running through a town and to take the water-supply from the same stream; but it is recognized that there is an economy of health as well as of wealth, and that it actually pays in the end to spend thousands of dollars on sewers and reservoirs. Let the public once become convinced that the economy of life in the home is to be measured, not by the cost in dollars and cents, but by the product of this life,—healthy, happy men and women,—and we shall hear less grumbling over the cost of living.

Man is a gregarious *animal*, but in proportion as he

becomes a "living soul" is he capable of the highest joys and the best individual development when he is not crowded and jostled and drawn along without his own volition.

The more communal pleasures increase and demand a greater share of the income, the more cheerless the home becomes and the more indifference is manifested toward the joys of family life. The house becomes only a place of shelter and storage, to be left behind when real enjoyment is desired. With it is associated only the drudgery of the daily routine, not the delight of living.

This tendency is shown not only by the nightly crowds at all popular pleasure-resorts, but by the equally large crowds of women seen daily on the shopping streets. The estimation in which the home is held by those who make the purchase of a twenty-five-cent collar an excuse for three trips to the city cannot be very high.

If there is to be an aristocracy in America, let it be an expression of the real American character which, as Hugo Münsterberg has pointed out, is beginning to be very evident to the student of history. Let it be shown in the higher ideals of living, in the standards of health, of manners, and of æsthetic surroundings. The material is at hand. Who will shape it? Who better fitted to mould it aright than the young men and young women trained, in the higher institu-

tions of learning, to separate the true from the false, to appreciate the real and to disregard the sham? If they cannot begin this work, then the colleges have missed the mark in the education they have given.

The educated woman longs for a career, for an opportunity to influence the world. Just now the greatest field offered to her is the elevation of the home into its place in American life. The home and the school are the two pillars upon which American institutions stand. The proper correlation of these is the work of the coming years if there is not to be a collapse of democratic institutions. The school can do much, but it cannot undo all the mischief done in the home.

If, as all recent writers on the subject of social economics seem to be agreed must be the aim of the twentieth century, the Anglo-Saxon ideal of home life is to be maintained, the housekeeper, man or woman, whichever it may be, must take the conscious direction of the home life and so order it as to secure not only the most economical but the most efficient results, not in lavish display, not in a large bank-account, but in the best-developed men and women, the product of that home.

No words are more misunderstood or misused than thrift and frugality. In popular estimation a thrifty person is stingy, a frugal man is a miser, whereas history shows that these traits are those which are

essential to the preservation of the race. They are the reasonable restraints which make for health of body and mind.

Wise expenditure of money, time, and energy in daily living, how shall it be determined? The following pages offer no panacea for existing evils, only a few suggestions as a basis for future study.

The need in household organization is for a *complete readjustment in accordance with modern conditions*, an adjustment which may be made without losing that which is essential if a serious study is undertaken of the various elements which go to make up the daily routine. Without this basis of knowledge any effort will be likely to cause confusion.

I am well aware that it is useless to attempt to change a race tendency, but are we so sure that this ignoring of home duties, this attempt to bring the home into line with certain economic trend, is a true progress, or is it one of the retrogressions which accompany all progress, and only a phase, a result of unthinking imitation or of ignorant carelessness?

Charles Kendall Adams in the *Atlantic* of August, 1899, writes: "Education by the press, education by the family, education by the church, education by the schools; it is by these institutions alone that the people are to be safely guided, for it is these alone that are the 'ever-burning lamps of accumulated wisdom' that are able to light the pathway of progress."

If, as Patten says, "There is no tyrant like a home; nothing else demands such implicit obedience," shall we throw off the yoke and so lapse into anarchy, or can we modify the government of the home to suit the freedom within limits which the social trend of the time recognizes as essential?

The home has survived the shock of losing most of the intellectual and religious education of the children. Will it bear the amputation of the material industries represented by the kitchen? We answer, Yes, if the home is that place of *moral* education where the *mother* is, the mother to world-children, if not to those of her own flesh and blood. The home still means the perfection of the child-life for which it exists. It is this ideal which will preserve the Anglo-Saxon superiority if anything is able to do it.

CHAPTER II.

THE SERVICE OF SANITARY SCIENCE IN INCREASING PRODUCTIVE LIFE.

"A tendency to underestimate the future remains as a relic of savagery."—BULLOCK.

"Those nations that have attained the highest civilization and wielded the greatest influence over their contemporaries are those that have exercised the most careful guard over health."—Quoted by B. W. RICHARDSON.

"Man, whatever else he may be, is essentially and primordially a practical being, whose mind is given him to aid in adapting himself to his environment."—WILLIAM JAMES, 1899.

THE great complexity of modern life causes such a diversity of types that the old proverb "What is one man's meat is another's poison," is more than ever applicable. Therefore, no rules for the expenditure of the income can be given which will suit all conditions; only certain principles may be stated along the lines of which each must work out his own rules of conduct. The one fact standing out clearly is that if man is to be an efficient, productive being, an "economic man" and not a "social debtor," then he must be in that condition of body and mind which

will enable him to do his work in the world, whatever that may be.

Instead of a purely economic basis, let us consider the standards of living from the point of view of health, both physical and moral; of efficiency, not only as a mechanical machine, but as a creature with intellectual and æsthetic possibilities, as the highest product of civilization.

It is most difficult to draw the line between those comforts in daily life which increase the uplifting tendencies of civilization and those luxuries, those forms of indulgence which degrade the soul and debilitate mind and body.

Increased facilities for personal cleanliness, more comfortable beds, larger rooms, greater variety of food, better pictures on the walls, all help to raise the level of daily life above mere animal wants and mere existence; but when an individual becomes so refined and delicate that existence becomes impossible without the luxurious surroundings common in modern days, he is in a fair way to become eliminated from the factors of race progress. Unless such persons go into camp life or yacht life for a few months each year, debility is sure to follow.

Again, the introduction of running water, of sewing-machines, of servants, into the homes of hard-worked women would seem to be an unmixed blessing, but typhoid fever and diphtheria, backaches and

injured spines, soured dispositions and endless bickerings have resulted in a lower stage of civilization instead of a higher. What is the matter with the so-called advance in life? Why is it that better wages, shorter hours, more physical comforts do not lead to happiness or refinement? Why is it that social questions seem more hopeless than ever before, so that the student of philanthropy dreads to awaken a happy, dirty, lazy family to the possibilities before it, lest the last state shall be far worse than the first? Because by thrusting the implements of the highest culture into the hands of those not strong enough to hold them safely, we have given sharp-edged tools to children. "When civilized man has more privileges than he deserves or requires, he lapses into practical barbarism."

The so-called improvements are seized upon not because of their value, but in imitation of others. The houses, furniture, food, ornaments of the great mass of the people are chosen because some one else has them, not because of any need in one's own consciousness which they satisfy.

Is not this trait of mere imitation without the use of thought or reason a most serious menace to real progress? Go through a great department store, note-book in hand, and check off the articles which are valueless either for use or ornament and those which, with a semblance of either, will lose the little

value they have with the first day of use; then go into the home for which the articles are destined and note the amount of money spent for these things in comparison with that spent for the essentials of good living and for the things which make for moral and mental advancement.

The only practicable remedy yet proposed is education in true standards of living, in what constitutes better homes, more comfortable conditions, and in a clearer perception of those tendencies toward mere imitation and luxury which lead to degeneration of mind and body.

What better method of determining these standards than by measuring them with the measure of health gained,—physical, mental, spiritual health? Any comfort, any expenditure of money which will increase health is legitimate, for health is not only the workman's capital, it is the essential factor in the success of the author, the business man, and the pleasure-seeker. But it is equally true that all above what is needed for healthful development is luxury and tends to debasement.

An increased food-supply would be conducive to the health of the laborer, while the very abundance on the tables of those who take no thought in the matter may lead to over-indulgence and undermined health.

Relief from daily drudgery will render the life of

many a woman more tolerable, but when it only results in idleness, dissatisfaction, and a mania for shopping and the bargain-counter, such relief is not in the line of higher standards of living, but is in the nature of luxury, which undermines the health of the body politic and leads to sure decay.

But it must be borne in mind that standards are not the same for all; that which is luxury for one family may be a necessity for another, so powerful is habit and education, but each should have only that standard which proves conducive to the best health, and in this the development of sanitary science is of the greatest service. Standards of living should be regulated, not by money spent, not by servile imitation of others, but by that which will produce the best results in health of body and health of mind.

At first sight this might seem to be pure materialism, but nothing is better recognized to-day than that health includes contentment of mind and serenity of soul; that an environment of pictures, books, and pleasant society will bring relish to the plainest food and serve to maintain the highest ideals.

It is, then, not in the material portion of the daily living that we are to look for improvement so much as in the *ideals*, standards, aspirations, by which the uses of the materials are governed. And it is just in this particular that most of the recent discussion of household economics and woman's work, and the

conditions of living, seem to fail. It is taken for granted that if the material conditions of the home are ameliorated, if the kitchen is taken out of the house, if the charwoman lives outside, if the artistic decorator has been allowed free scope in the drawing-room, if the school teaches cooking and sewing, if the college teaches business law and economics, or if women receive the same wages as men and have the right to say how taxes shall be spent,—that when any one or all of these things are obtained, then life will be all sweetness and light.

But these material conditions, while having their value, do not in themselves go to the root of the matter. Their chief function is in the influence they have on race ideals, on individuals or group standards. It is in the perfection of control of matter by mind that higher civilization consists. The savage is dominated by nature; the man is civilized in proportion as he dominates nature and bends hitherto unconquerable natural forces to minister to his needs.

The housewife who is worried by her servants, cheated by her tradesmen, and is helpless before her furnace and her cook, is still a savage, has not grasped the meaning of the ennvironment which we call home.

A certain degree of exertion, bodily and mental, self-control and conscious direction of powers of mind, are essential alike to bodily health and individual development. When release from the necessity

of toil brings such bodily indolence and such mental indulgence as to result in lack of stimulus to useful activity; when the throwing off of religious trammels renders moral questions difficult of decision, then this freedom tends to disease of body and mind. In other words, the moment ease of living lowers vitality and lessens resistance to disease, that moment the boundary between comfort and luxury has been passed.

To have pleasure in living implies an ideal to live for, a goal to reach by striving. Where no incentive naturally exists, as is sometimes the case with those who have the traditional golden spoon, artificial prizes are offered, tournaments, yacht-races, millions to be made, and for the women some hobby of collecting, of travel, of self-culture.

In humbler life, to gain a home for wife and children, to secure an education for a loved son or daughter, is incentive sufficient to sweeten toil and shorten long hours of labor.

To "rise in life," as indicated by size of house, number of servants, or price of bric-à-bric, has been the unworthy motive of many a household, and in that way lies death to all the better ideals.

It has been clearly brought out by several recent writers that the prevailing economic, political, and social ideals have been profoundly influenced by the acceptance of that law of evolution in the organic

world which counts the individual as nothing except as a factor in race progress; which demonstrates that only the fittest survives; that through the strongest are race characteristics passed on.

The ideals governing the thought of intelligent persons a century ago were development of the individual and protection of the weak. This individuality is now threatened by trusts and great corporations, crushing to the wall all weak competitors. The methods of education, even, bring a whole class or school up to the same standard without reference to individual preference, and both tend to reduce to a communistic level all but the very few.

Moreover in family life, as in political, irresponsibility has come in with the going out of the religious ideal. Self-sacrifice and menial toil are despised in the light of the economic ideal of the present. The home has ceased to be the glowing centre of production from which radiate all desirable goods, and has become but a pool toward which products made in other places flow—a place of *consumption*, not of *production*.

Instead of a nursery of good citizens, teaching obedience, thrift, self-denial, self-helpfulness, the home has become for many a place of selfish ease, of freedom amounting to license, a receiving all and giving nothing.

The family as a unit stands between the socialist

ideal of the individual as a unit and the economic ideal of the community as a unit.

So long as the anticipated joys of a future world could sweeten daily toil and flavor daily bread; so long as the pleasure of giving to the missionary cause made an extra hour's labor pleasant; so long as saving for the children was a high ambition, little was heard of housekeeping troubles or of overdrawn incomes. When, however, the ethical and altruistic point of view became changed and from childhood each one considered his own wishes as of more consequence than those of the family, and when temptation was offered in the form of unheard-of luxuries on the instalment plan, and when food became abundant, representing high-class living, then a general recklessness possessed the household as well as the coal-miner or the lumberman. The housewife has but followed their example and paralleled the waste of small-coal in the mining region and the wholesale destruction of forests, by her garbage-pail and overfurnished rooms. She is not primarily to blame for the fact that average American housekeeping costs twice as much as is necessary; it is due to the general reckless extravagance in the air.

It becomes important to ask, "What are the standards, not of bare existence, but of good living—of physical comfort, mental health, and spiritual satisfaction?"

If your ideal, gentle reader, is that of the sleek tabby cat, plenty of food and sleep, the softest corner and no duties, then we have no message for you. To *live* is to appreciate the joy of being a part of the world of action, to share in the joy of work, and work for mankind; this joy includes an apprehension of the possible meaning of it all.

Most human actions are prompted by the desire to escape pain or to procure pleasure. These efforts will be successful in proportion as knowledge controls these actions.

Human welfare includes health of mind as well as health of body, and sanitary science, in its broadest sense, includes all that relates to either. It is a knowledge of the practical standard of sound health for the community and of the means of securing it. Sanitary science not only teaches the means of increasing the productive power of the wage-earner by lessening his days of sickness, by so nourishing his body that it may serve him longer and with more efficiency, but it also furnishes the rules of conduct which make any man capable of the highest enjoyment of life by teaching him self-control in the use of all that goes to make up the sum of human happiness.

"Children are workers in preparation, are future citizens. The state cannot afford to allow them to grow up inefficient." Therefore public welfare

demands that the home life shall be governed by the best knowledge which science has been able to gather with reference to health and efficiency.

It is man only who has the power to see beyond the present and by resistance to its alluring temptations to secure future gain.

Each human being has a money value to the state in proportion as he is a productive individual with either hands or brain. Not only death but sickness lessens the usefulness of an individual, since the care of one sick person means loss of work to others, expense for drugs and physicians, and it means even more loss by the weakening effect of sorrow and anxiety.

The higher the standard of living, the more costly do the accessories of sickness become and the greater the blighting effect upon the higher intellectual faculties.

It has been estimated that on an average each death in a community means 720 days of sickness with its attendant cost in money and anxiety.

For the standard of income we are now chiefly considering this may bring an actual expense amounting to even five thousand dollars. It may mean the crippling of the family as to the children's education, perhaps loss of position of the father, perhaps years of wearing invalidism for the mother, and a loss to society of the benefit which an efficient family always confers.

When it is considered that the death-rate in America is nearly double that which is estimated as necessary, and that ten in every thousand needlessly die, half of them perhaps in the prime of life, that for a city of one hundred thousand this means five hundred deaths annually of persons who are most valuable to the community, it will be seen why the study of sanitary science is so strongly urged and why the cost of the various departments of household expenditure should be considered not only in the light of economics and æsthetics, but of hygiene.

If the requirements for healthful living can be once understood and an ideal held up to the young student while his habits are yet plastic, a great advance is possible in the pleasures of life and especially in the beauty of living in conscious obedience to the laws of life.

CHAPTER III.

HOUSEHOLD EXPENDITURE. DIVISION BETWEEN DEPARTMENTS ACCORDING TO IDEALS.

"National prosperity depends less upon the amount of wealth than upon the utilization of the national possessions in deriving the annual income."—BULLOCK.

"Economy of time, effort, and materials, and therefore of expense, is in essence scientific."

"With a progressive people, the satisfaction of existence wants serves merely to arouse new desires and to stimulate men to satisfy them."

THE sum of ten billions of dollars, more or less, is spent in the United States for household expenses, and yet very little attention has been paid to the rational division of the annual income between the different departments. The business man has found it easier to make money than to save it; the economist has been fully occupied in finding out how money was made.

That the results of this outlay are not satisfactory there is abundant evidence. That the money is not economically used is seen in the rapid changes in habits of living due to economic pressure.

Hence, before it is too late, a careful study of the conditions of life affecting the household expenditure should be made.

The cost of living in any given case depends upon the ideas and standards of the person spending the money; that is, it is a mental rather than a material limitation; a result of education rather than of location.

In America the typical family of the economist, of father, mother, and three children under the earning age, can live very comfortably on ten dollars a week or five hundred dollars a year for the necessities of material existence. Moreover, if its members will avail themselves of the education of the libraries, of the art museums, of the lectures and classes, of the baths and parks, pleasure-grounds, the non-material pleasures, and of the opportunities provided for the children at the public expense in most cities, their actual income is equivalent to double that sum.

The real struggle in living comes in the case of those whose character and principles demand that they shall pay for the pleasures as well as the necessities of life, and in whom the desire for ownership demands the personal possession of books, and pictures, for which they are willing to deny themselves even comforts. An income of sixteen dollars a week or eight hundred dollars a year admits of this gratification in a fair degree provided that the

fines exacted for the disobedience of nature's laws are not too heavy.

Therefore, for the sake of argument, we may say that our present discussion begins with that sum, or the lower limit of choice, and from that to an upper limit of four or five thousand dollars—since above that sum, as a rule, quite different elements enter; i.e., either much is given in charity or in the sustaining of public institutions, clubs, societies, or in collecting books, pictures, etc., or in promoting sport or industries. While the same general and high-minded ideals should govern the expenditure of the larger income, there is not that need of close calculation on some points; also, in general, there is a far better business management of the larger income.

In the present condition of American society probably the greatest difficulty is felt by those who have from fifteen hundred to twenty-five hundred dollars a year for all expenses, because their tastes are educated and their habits acquired in such a way that twice that amount would be needed to make any approach to satisfaction, for each step only opens the door to another want, and also because they are rarely skilled in the use of money.

A writer in the *Fortnightly Review* * has cleverly

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* Joseph Jacobs, *Fortnightly Review*, 1899.

sketched the "mean" Englishman as distinguished from the "average" of the economist. This man earns about six dollars a week. The "mean" American will earn at least ten dollars a week, and with the rapid rise made possible by better industrial conditions and the greater opportunities for earning money the "mean" American family should have fifteen dollars a week, with twenty in sight as a stimulus to exertion. From this class of intelligent, self-respecting, self-supporting, industrious persons rises, in the very next generation, thanks to free schools and democratic plasticity, a group which are typical Americans whatever their grandfathers were. These are the educated persons in the community, young college graduates in business, professors and teachers in schools and colleges, clerks, small tradesmen, and skilled workmen. And the income of this typical family is from fifteen hundred to three thousand dollars a year. Such are the possibilities in the industrial conditions of America that it is not uncommon for it to rise to thirty thousand dollars before the children are grown.

Under the pressure of nineteenth-century conditions, it has been found that the home as at present conducted is not managed on an economical basis so far as money value or outward semblance of luxury is concerned. That it fails in the more important essentials of comfort is proved by the great increase

of clubs and of hotel life. On what grounds, therefore, can the justification of individual homes be based? Only on the conceded fact before stated that the home is the germ of Anglo-Saxon civilization. If the income is to be used so as to give the fullest satisfaction of human wants, there must be classification of those wants in order of importance and some restraint of unreasoning impulse. "Style in living" has no "standards," no basis in morals, religion, or economics. The fashion of the day or the whim of the moment is indulged without a thought of the consequences to the next generation. This absence of safeguards, this letting down of ethical barriers brings countless temptations to extravagance.

To reconcile the uplifting tendency of the struggle to "better one's condition" with the degrading result of striving to seem richer than one really is and to avoid the debilitating effect of luxuries is America's problem for the twentieth century. As has already been said, it is for those educated persons with one thousand to three thousand dollars annual income to lead the way in the studies necessary to be undertaken before any authoritative statements can be made, and to show what the public ought to have; not always to cater to what the public likes.

The cost of living should be so balanced as to secure the greatest comfort and convenience possible

without sacrificing anything necessary for health, physical, mental, or moral.

A few examples of actual budgets will be instructive as illustrative of methods of attacking the problem. That very little variation is allowable until the lower limit of choice is reached is seen in a comparison of the expenditure of the "mean" Englishman and of a New York family in about the same walk in life.

Nos. 1 to 5 illustrate the variety of choice. One family economizes on rent, another on clothes, another on other expenses. No 4 is, it is to be feared, a very common American budget. No. 5 in the table shows what may be done by a thrifty family who will do their own work, and live in the suburbs where the garden reduces the food expense. No. 6 shows how many families of women economize. A widow, with a mother and two children, is a dressmaker and has her noon meal and most of the clothing for the family from her customers.

Nos. 7 and 8 are most instructive as showing types in different localities, but illustrating what must be paid for the necessities of life. It is doubtful if either family could safely cut down on food.

Dr. Engel has formulated four laws confirmed daily more and more. As Dr. Nitti says: "Laws of which, in all the family budgets I have examined, I have myself been able to prove the absolute exactness."

TYPICAL BUDGETS.

Family Income.	Percentage for				
	Food.	Rent, and Car Fares to and from Work.	Operating Expenses: Fuel, Wages, etc.	Clothes.	Higher Life, Savings, Charity, etc.
$3098, three adults, two children	27 5	21.1	16.8	10	24.6
$2500 (Mass.), three adults, no children	25	25	13	12	25
$2500 (Mass.), two adults, one child, much company	32	18	18	10	22
$1980 (St. Louis), four adults, two children	36.3	24.2	20.9	18.60	
$950 (Mass.), two adults, three children	20	19	16	15	30
$600 (Boston), two adults, two children	23	26	4	5 (Travel, Sickness, and Sundries.)	26.1
$535 (N. Y.), two adults, three children	55.2	22.4	5.3	9.4	15.9 7.7
$312, "mean" Englishman: two adults, three children	55.2	15.5	8.9	13.1	7.3
$300, Dr. Engel's estimates	62	12	5	16	5.0

"The *first* law is that the proportion between expenditure and nutriment grows in geometric progression in an inverse ratio to well-being; in other words, the higher the income the smaller is the percentage of cost of subsistence. The *second* is that clothing assumes and keeps a distinctly constant proportion in the whole. The *third* is that lodging, warming, and

lighting have an invariable proportion whatever the income. The *fourth* is that the more the income increases the greater is the proportion of the different expenses which express the degree of well-being.

"The less a worker gains the more he invests in food, renouncing out of necessity all other desires." (*Bull. de l'Institut International de Statist.*, 1887, pp. 50, 55, 57.)

From the examination of various budgets and from observation of many families, as well as from twenty-five years' experience in housekeeping, I am convinced that the tendency to extravagance in the American household comes in the two columns Food and Operating Expenses—if the latter include the incidentals or sundries and unexpected outgoes, which count up very fast. Individual extravagance may frequently occur in clothes.

In food I believe the trouble is largely one of waste. Twice as much is ordered as is really necessary, and in small families where there is no separate servants' table, unless very great care is taken, large portions of the most expensive food are left to be served in the kitchen, so that the total cost of food is very high. If the ordering is left to the cook, this is sure to be so. It is for the interest of the grocer and butcher to have the bills large, and the tips they give to secure this would astonish many a man who now

wonders at the size of his bills. Only an accurate knowledge of how much is really needed, and a close watch over the amounts ordered, can keep the food cost down. It is policy to allow the common, inexpensive articles such as flour and sugar and potatoes to be used freely, but the quantities of meats, high-priced vegetables, and confections should be carefully calculated. One remedy for the extravagance and consequent debt resulting from this excess of expenditure in one or more directions may be found in a system of strict account-keeping as a check to the impulse to purchase which is often repented of when too late.

In order to render the accounts of value there must be certain recognized standards of possible attainment to serve as a guide to the young people in establishing the traditions of the new home.

The following table showing a theoretical division of the several incomes may be helpful in some cases and may stimulate the family provider to keep accounts so systematically as to be able to give the several percentages along these division lines.

I hear the protest arising from three fourths of my readers that life would not be worth living under these circumstances; it would be bondage. I reply, not after the habit is once formed. Bagehot said, "There is no pain like the pain of a new idea"; but on the other hand Mark Twain wrote, "You cannot

SUGGESTED BUDGETS.

Family Income.	Percentage for				
	Food.	Rent.	Operating Expenses, Wages, Fuel, Light, etc..	Clothes.	Higer Life, Books, Travel, Church, Charity, Savings, Insurance.
Two adults and two or three children (equal to four adults):					
Ideal division	25	20 ±	15 ±	15 ±	25
$2000 to $4000	25	20 ±	15 ±	20 ±	20
$800 to $1000.....	30	20	10	15	25
$500 to $800.....	45	15	10	10	20
Under $500.....	60	15	5	10	10

throw habit out of the window; it must be coaxed down-stairs one step at a time." New habits may be difficult to establish, but once fixed they maintain themselves. The moral of which is that it will pay in the end to establish a custom of looking after the small details which will cease to be a burden after a few months. This is especially necessary if the help is constantly changing. Let the rules of the house be known when engaging any servant, then there will be no difficulty. Much of the confusion so prevalent arises because there are no rules—no accounts.

Again, the temptation to spend for things pleasant but not needful, or even beautiful, either for the household or for personal gratification are many, and

it requires some moral support, such as an account-book or some great ideal to strive for, to keep the pocketbook closed. What the liquor saloon is to the drinking man the bargain-counter is to the aimless woman.

The reason a young man fears to marry is not because of the present cost of a house, but because he cannot estimate the future cost of running it. He has no rule to go by.

In most newly established homes there is no governing principle at the foundation to which both man and wife are committed and for which both are willing to make sacrifices.

How far shall be carried the habit of saving, of life-insurance, etc., is an open question. Certainly each family should be able to take care of itself under all circumstances,—such as sickness, lack of work for a reasonable time, etc.

The best investment is in the education of the children to be self-supporting, and all should try to "better themselves" as the phrase goes, because the whole community will rise with the elevation of individual homes. That a certain amount should be put by each year for an emergency fund goes without saying; how much depends upon circumstances. If life-insurance is the best, then in that; if saving-banks or bonds, or if in small amounts of cash, then in them This question will bear study; but in all

cases each child of rich or poor should be so developed mentally and physically as to be capable of taking care of himself if he is ever called upon so to do.

If a family has learned to lead a dignified, comfortable life on fifteen hundred dollars, it will not be difficult to spend more. It is only when the life has been badly adjusted that increase of income brings with it no answering response.

If, on the other hand, the socialist limit of eight hundred dollars a year is to prevail, then the family that has had fifteen hundred or two thousand dollars has a better chance of being happy than the one that has felt pinched on ten thousand dollars.

It must be said for those who advocate the eight-hundred-dollar limit that they assume that much of pleasure, that all of the education, and many of the expenses now borne by private means will then be provided for by the state.

At present we may, I think, take eight hundred dollars as the limit below which a family can only take care of its physical needs,—rent, food, clothes, life-insurance, etc. For amusement, recreation, education, instruction, it turns to the means provided at public expense.

CHAPTER IV.

THE HOUSE. RENT OR VALUE AND FURNISHING.

"Science has little power to alter national thought by direct means, but it has great power in creating new economic conditions, and these modify national thought."—S. N. PATTEN.

"Public opinion is changed by economic conditions—not by creeds."—S. N. PATTEN.

"The most judicious use of money is to form for one's self first of all as pleasant and comfortable a home as is consistent with one's means. Money thus spent is money safely invested."—EDMOND DEMOLIN.

THE factors governing the per cent of the income paid for housing are:

1. Sanitary requirements.

2. Social requirement; location; architectural appearance.

3. Standards of living.

The house is one of the most serious difficulties in the way of ideal living, for we have inherited the sins of our ancestors in tangible form and, in addition, those of conscienceless contractors and greedy capitalists.

The family whose needs we are considering—one

with an annual income of fifteen hundred to three thousand dollars—finds the greatest difficulty in securing the conditions given above either for purchase or rent. Neglect of sanitary precautions by the owners of houses has been so flagrant that the expense of putting a place in condition to live in is often nearly equal to that required to build anew. The rapid, irresponsible growth of many of our towns, whole streets being built up before any system of grading or of sewerage has been established, has done much to keep the death-rate high. The frequent changes in streets or section due to the putting in of railroads or factories or to the intrusion of business necessitates as frequent removal, and to this is largely due the habit our typical family has acquired of renting instead of owning a house.

The rent is a definite and certain expense, and a place of one's own is, in the shifting condition of the modern town, a most uncertain asset and not the safe investment it has formerly been, and besides it is a continual source of unexpected expense. For instance, a change in the city regulations as to plumbing may entail an expense equal to a year's rent.

At present this feature of the cost of living cannot be ignored, but must be reckoned with in any discussion of family expenses. It must be acknowledged that although some families do suffer exceeding discomfort in order that, judged by the house they live

in, they may be supposed to have reached a higher rank, yet an increasing proportion of intelligent young people are looking for better sanitary conditions as well as for social standing.

Nevertheless the instability of the material home, the fact of renting instead of owning an abode, has made possible much of the retrograde movement in home manners and customs. While there should be an ideal which is independent of the mere material surroundings, as a fact results seem to show that it is lacking to a deplorable degree.

It is for this ideal, this sense of the sanitary and educational value of the home cosmos, that education is demanded, that public sentiment needs to be created. An insistent demand would soon produce a variety of house better suited to the wholesome living which sanitary science demands.

A home means four walls and, in this climate, a roof, into however many compartments the space so enclosed may be divided. Sanitary rules say that the space for each person should be not less than 300 cubic feet; that light and air shall have access freely; that water shall be freely supplied and quickly removed when used; that the soil on which the structure stands shall be clean, dry, and porous. These requirements must be met at whatever cost of money is necessary to procure them, and yet how many of the thousands of house-hunters in the cities

and towns ever think of these things, or, if they do, weigh them in the balance with the style of the porch, the number of bay windows, or with fashion as to street? It is not only in the slums that there is insufficient air-space. So long as ignorant men and women will rent these closets under the name of rooms, so long builders will put them up. So long as the dining-room is of less consequence than the front hall, so long will the showy part of the house be emphasized.

Economy of labor has not been thought of in the construction of houses. In what other business would the coal-supply be dumped on the sidewalk to be shovelled and wheeled into the cellar, only to be brought up again; the ashes carried down, only to be again brought up and carted away? How few of the really valuable mechanical appliances are found in a house! How little attention is paid to the saving of labor! The heaviest kettles are always on the lowest shelf, and articles of daily use are so placed as to require miles of travel. House-architecture is fifty years behind shop-building and factory-construction. It goes without saying that the ignorance of the housewife as to what is possible, and her traditional conservatism, are the causes for this state of things.

The attention of students of social science should not be wholly absorbed in the so-called tenement-house problem; the needs of the higher-class wage-

earner should be considered, and by this means the other object will be soonest accomplished. Example is more powerful than precept.

I can think of no greater missionary work possible than that some philanthropic individual should offer a competition in house-architecture which should illustrate the possibilities of modern science, unless it might be the offering of a prize for the best essay on the living in such a house to be written by a college woman of five years' experience in housekeeping.

A house should be comfortable inside, capable of pleasing arrangements, and so planned as not to require excess of work to care for it. Here is true economy. The ideals and standards of life are what should rule.

A home must mean more than four walls and food: it must stand for one's self; it must be an outer garment as it were, showing the taste and cultivation of its occupants.

Exclusive of land, the cost of housing with the demands of modern life, water-supply, drainage, hard finish, etc., is about one thousand dollars per person, or four thousand dollars for the typical family of five. It may be halved or it may be doubled in many instances without serious difficulty, except in respect to location. It may be quartered or it may be quadrupled, but these are the two extremes of requirement. One thousand dollars will build only

two rooms (renting for ten dollars a month, one hundred and twenty dollars a year) of a tenement, or five rooms of a suburban cottage, giving a minimum of light and air. Sixteen thousand dollars should build all that any family could use for themselves alone, so far as essentials go. Of course sentiment enters into rent, desirable locality, and the reverse, but too often cheapness means lack of water and air and cleanness, and dearness means bad taste in ornament or lavish expenditure for mere show. Our houses in America are mere extension of clothes; they are not built for the next generation. Our needs change so rapidly that it is not desirable. It is far better to spend less for the mere house and more for what goes on in it—the real life.

Certain questions should be considered by each family. First, what is the object of the house? What are its essential features? There is great need of economic and domestic education among architects. It would be possible to add beauty to most family residences without detracting from their utility.

Second, what proportion of the income should be paid for rent? Sufficient to secure the requirements of health, even to half the income. This is not necessary if the family will avoid fictitious values due to supposed superiority of neighborhood or to mere pretension in building. Without heat and light, twenty per cent of any income between five hundred

and five thousand dollars a year should secure safe shelter for a family. If it does not, there is work for a social-reform club in that community as well as for the board of health. The fact that many families pay twenty-five per cent is the first evidence of unsound economic policy, but it may often be interpreted as a tribute to higher ideals provided the increase here is met by a decrease elsewhere so that the sum total shall keep its proportion.

The needs of the family should be carefully set down and the plan of life in the house made out before it is rented or built. Some measure of privacy should be secured to each one, and yet there should be one common meeting-place. The pretentious custom of a large drawing-room furnished for show, occupied only when receiving callers and consequently in which hostess and visitors alike feel the chill of dead things, not the warmth of daily emotions, is responsible for much of the housekeeping misery of the time. Unless the family is large enough and with a combined income amply sufficient to entertain frequently, this habit of keeping a large room for a possible wedding or a funeral is a vicious one. The space may be utilized for the comfort of the family in many other ways, either in separate sleeping-rooms or in a large living-room.

All the mechanical arrangements of this shelter must be under control, that is, they must be under-

stood by the one in charge of the house in order that the cost of living in the house may not be in great excess of the comfort and health resulting. This is just as essential as a knowledge of the machinery he is to run is for the engineer who is obliged by law to have a license. If each householder were obliged to pass an examination on the mechanical arrangements of his or her house and show a knowledge of furnace, battery, and flue before being allowed to occupy it, a cry of state interference with private rights would be at once raised; but in that day when it is clear that the carelessness of men threatens to extinguish the race it will doubtless be done.

The office of the house is not only as shelter from the elements, not only as shelter from the curiosity and interference of the outside world, but as an expression of the persons in it—of their ideals, tastes, education, and needs of soul as well as of body.

Besides the number, size, and arrangement of the rooms, there is to be considered the color of the walls, the harmony of decoration, the arrangement of the furniture and pictures. This is not a matter of little consequence or of outside taste. A home is an expression of family ideals, else the place is a boarding-house. That women who are nominally at the head of households take the ready-made plans of landlords and decorators and only stipulate that all shall be as stylish as Mrs. So-and-So's is proof of

their low ideals of what a home means and of their unfitness to preside therein. Ignorance and inefficiency in the home are not good recommendations for the opposite characteristics in the business life for which they long.

In no one item of expenditure is there so much room for the exercise of ideals, for the development of character, as in this one of providing the best surroundings for the family life. In no department are knowledge and taste of so much money value—for it is not the most expensive but the most appropriate and harmonious article which is the best. The beauty of cleanliness is not sufficiently appreciated by the ordinary purchaser. Here again it is what others buy and not what appeals to one's own need that leads to the spending of money for a multitude of articles which catch dust and become grimy or else require an undue proportion of time in a vain attempt to keep clean.

It is certainly wiser to pay higher rent for a modern house than to spend much on furnishing an old one; and if the house is so finished as to need little care, there is an additional gain: less paint to clean, fewer stairs to go over, gas instead of coal,—all these things are to be considered in the total of this part of the living expenses.

If the rent of a given house is low compared with others, one of three things is the probable cause—

undesirable neighborhood, an old house out of repair, or simply cheap construction.

The householder must balance well the different elements of the problem.

Fashion should not be allowed to rule—only sanitary conditions and moral health of the children.

The following are some of the questions which should be propounded by every householder:

Is the soil dry ?

Is the cellar dry and light ?

Are the drain-pipes in sight ?

Are the drain-pipes sound ?

Does the furnace or the steam-boiler warm the house ?

Has the bath-room an outside window for sunlight and a double door ?

Has every room some means of cross-ventilation ?

Will it be possible to keep the rooms clean without inordinate work ? Is there much cut, painted, or ornamented woodwork, etc.? Are there many stairs, and inconvenient ones ?

How many servants, if any, will be needed for the care of the house ?

CHAPTER V.

OPERATING EXPENSES: FUEL, LIGHT, WAGES, AND INCIDENTALS.

"Few women when they assume the care of a household know the exact value of the household plant; the amount to be deducted each year for wear and tear; the relative proportions expended annually for rent, fuel, food, clothing, and service; the number of meals served and the approximate cost of each; the amount of profit, waste, or unproductiveness that results from all expenditures made."—LUCY M. SALMON.

"Enjoyment depends on state of mind, comfort on habits."

"The complaint of one's assistants is a boomerang. It writes the complainant down in large letters as himself poorly fitted for his responsibilities."

HAVING secured a comfortable, healthful house in a satisfactory locality, the daily life is to be established in it. It is to be warmed, lighted, and kept clean and in repair. In short, it is to be operated for the benefit of the family as a railroad is for the benefit of the public; and the same far-sighted business sense should govern these expenses if the family is to find profit in the life such as the stockholders of a well-managed railroad secure as a result of their knowledge.

The ideal of health and comfort, mental as well as bodily, should be held constantly before the eye of the household manager, and no ignorance or parsimony ought to peril either. A maximum of efficiency must be maintained at a minimum of cost.

The compartment of the family purse from which these expenses are paid is usually like a sieve, retaining nothing for emergencies. No portion of the income can bring so much comfort, and none is so difficult to expend. Waste of money elsewhere is compensated by crowding down the wages or by cutting off items small in themselves but affecting the family happiness.

This department also suffers from the lack of care in details which is required to keep any business at its maximum efficiency.

The present only is considered; nothing is used as if it were to be needed again. The common habit of handing down to the next generation valuable heirlooms having been lost, with it has gone that forethought in small daily duties which preserves for one's own use one's belongings, personal or household.

It is this carelessness extending to children and servants which causes so large an outlay for the running expenses of the house.

Before a purchase is made, the labor involved in caring for it, or in cooking it, should be considered.

When a standard of living is once set, the cost of maintaining that standard should be considered. At this point our modern housekeeping is weakest. How much does it cost to keep a house of eight or of fourteen rooms?

How many hours of efficient service are needed for a family of five?

How much fuel should suffice for a suburban house of twelve rooms or a city house of the same cubic contents with fourteen rooms?

The reader will at once raise the question, is this not just that individual freedom, that variety of choice for which the earlier pages plead? Are we to bring all our methods to one measure, and is each to pattern after the same standards? By no means; only each must have his own standard and ideal to aim for, and must not live from hand to mouth as do savages, or servilely copy one's neighbor all unknowing of the exact conditions.

Because we acknowledge that there is *more* than business in the idea of home, let us not make the mistake of assuming that there is *no* business side to household affairs.

No man in his senses will set up any other manufacturing establishment with as little regard to the purpose of it all and to the future success of its operation as he will allow in the inauguration of his household.

Light should be regulated on hygienic principles as far as possible, and should not, as is often the case, be allowed to vitiate the air beyond reason.

The way in which ignorance on the part of housekeepers blocks social progress is seen in the difference between the development of electric transportation and domestic gas consumption. The use of gas for fuel was proposed before the trolley line was developed, but at each step in the introduction of gas obstacles due to ignorance of the relations of heat and of the management of mechanical apparatus have so far prevented the extension of this convenient and economical fuel. The manufacturers of domestic utensils have not shown that grasp of scientific principles which is expected of other trades, and small wonder that it is words, not deeds, upon which they rely to catch their ignorant customers.

The opportunity for the application of business principles to household management lies in the strict account-keeping which will check unrestricted expenditure on unessentials to the detriment of the fundamental needs. The engineer may design and put up an entirely satisfactory pumping-engine, but if an incompetent man is put in charge of it, or a competent man is allowed too little time to look after it, the machine rapidly deteriorates and finally breaks down.

It is a common experience that after an occupation

of a year or two a house becomes unsanitary, battered, saturated with odors of cooking, or that on trial it proves to be inconvenient for the family life.

If all the complex collocation which we call living gave real and lasting happiness, we might say that it was in the line of evolutionary progress. Since it frequently does not, but, on the contrary, is productive of discomfort and early death, why should we not consider the possibility of greater happiness through simplicity and consequent perfection; of greater satisfaction through the assurance that we have used our resources to the best of our ability?

I am told that the people of culture in New England fifty years ago paid one third their income for rent, but the annual expenses of the establishment were not in proportion what they are now. Life was much simpler, and the actual amount of work done was far less. The sanitary requirements of to-day were unknown. The handsome, simple furniture was more easily cleaned; the dust-catching bric-à-bric was absent; the laundry work was far less; and while the service of the table was dignified, it was not so elaborate as now.

There were no telephones, no gas, no lamps (most time-consuming in care), fewer callers, more true hospitality, few brass pipes to clean, on the whole less sickness. We have gained in conveniences, but have lost in real ease and comfort of life. It is true cer-

tain comforts have greatly increased: soft rugs have replaced the sanded floors; easy chairs, the straight-backed settle. But the knocker which announced the entrance of the visitor directly into the living-room is replaced by the electric bell, which calls a maid up one flight of stairs to the door, only to send her up another flight to announce the caller.

Has any one ever calculated the foot-pounds of energy and the time consumed in answering the door-bell and the telephone in a modern house? Has any housekeeper taken into account her increased demands as, year by year, these calls increase?

There is a constantly growing temptation to unnecessary expenditure for things small in themselves and pleasant enough, but not worth while, as would be seen if any effort were needed to obtain them.

One of the gravest objections to the telephone in a house is the atrophy of all forethought which it permits. Why should careful account of the larder or work-basket be taken each morning if a yeast-cake or a spool of thread may be ordered by telephone?

Refinement of living has benefited by the introduction of courses at meals instead of serving all the food at once, but the cost in time has been increased by more than the number of courses. Yet the average housewife will maintain that the expense is no more.

Let us try a readjustment of the different house-

hold expenses before we give up the maintenance of the individual home.

To-day it would be suicidal for a young couple of the professional class or of any class to pay one third of any income between fifteen hundred and three thousand dollars for rent, because the accompanying expenses of those things that make modern life are so much greater than they were fifty years ago.

There is so much more moving about than formerly. Car-fares count up. The woman goes shopping daily; the family go to the park to see the fireworks. The ice; the tax on hose and faucets; the cleaning of the furnace; the cleaning of sidewalks,—all swell the monthly bills.

There is no mystery about the increasing popularity of the apartment house. The trouble of estimating these expenses and of making repairs is shifted to the business man's shoulders, and the woman has so much the less money to be responsible for. For those who are busy with other duties, who travel or who are getting on in years and who can afford to pay for relief from care, a well-built apartment house may be a blessing, but as a family home for children it is a most extravagant luxury, and like other luxuries causes deterioration in the race.

Perhaps we shall be obliged to give up the family home for a time in order to find out how much it is worth, but it would be better for a few intelligent

women to first experiment scientifically, in order to put the subject on a practical basis, and then to publish their results for others to study. A social settlement for the study of the domestic questions pertaining to the life of those whose incomes are three thousand dollars a year would, I believe, be more valuable than one for the study of the annual expenditure of three hundred dollars.

The reader will say it all depends on standards. True; but sanitary standards cannot be so far different for different towns.

One railroad does not differ so widely from another in cost of running its cars that no estimates can be made from known facts.

How long should it take to clean a chamber or to do the chamber-work of the family of three or five? It would not be difficult to settle this if women were amenable to reason or if they had any training in mechanics, so that they could tell whether the person were wasting time and strength in passing to and fro ten times where once would serve.

The following estimates are given for the purpose of a definite point of departure for the study, which the writer hopes and believes will come.

For instance, with an annual expenditure of $3000, $500 for rent, $500 for wages, $500 for operation, $700 for food, $300 for clothes, $500 for the higher life may be allotted. If this does not prove to be

enough, then either wages or food or clothes must be cut down or a cheaper house taken. In deciding these problems, there is ample variety to keep up interest in life and to prevent all persons from falling to a dead level.

If two teachers, clerks, artists, desire an independent home life, a place of their own to come to after the day's work, it is quite possible to secure it in the following manner:

Assume the income of each to be $750 a year. $1500 will be the sum to be expended. Set aside for rent $300, for food $375, for service $150 (since there are no children and each will take care not to make unnecessary work), for clothes $250, for savings or emergency fund $200; leaving for travel, books, church, charity, lectures, and amusement $225. The last three items, amounting to $337.5 dollars each or 45 per cent of the total income, may be varied according to the individual choice without affecting the other items.

The insistence on each family living within its income and saving enough to prevent it from becoming a state burden is an ideal or a standard which must be cultivated. The happy-go-lucky way brings debt, disgrace, and that dependence which is debasing.

The ratio between rent and wages must be made a study in economics interpreted in the light of sanitary

science before a rational settlement of the service question can be secured. And no great advance in housekeeping can take place until this is done.

Agricultural labor suffers because when a boy is man-grown he receives man's wages whatever the quality of his work. There is no opportunity for discrimination in values and for rise of wages.

So in house service good work is not appreciated or rewarded, and the same wages are paid to a slow or slovenly maid as are offered to a quick, neat worker. No reward in the way of release from duty is offered for the quicker work, but only more and often unnecessary work is added in order to fill the time, in the same spirit in which the hotel guest tries to get his money's worth by eating through the bill of fare.

When the stage-coach carried its passengers and the mails over dangerous roads the driver was perforce a man of energy and resolution, of shrewd observation.

The horse-car with its guiding rails required less of its driver, and the position fell to those who could do little else.

Now the electric motor has changed the requirements, and in the suburban motorman we find many an old stage-driver and the same type of quick-to-act, capable man.

The moral is plain: change the requirements of household service by inventions and arrangements

which demand skilled labor, and the labor will come to it.

The unexpected forms a large part of life, the larger, the more complicated it becomes. No good manager is without a fund to draw upon for emergencies. In the household, debt usually comes because the fund has not been reserved. This one principle if insisted upon would lessen the nervous wear of housekeeping by an incalculable amount.

In many respects the average housewife is yet a savage, instead of the up-to-date woman she thinks herself, but in none more than in this failure to estimate correctly the future possibilities in the small household expenses.

Dr. Münsterberg maintains that the one thing an American does not economize is time, and as regards the household I think he is right.

There is rarely any system by which the maids are taught to carry out one thing when they go for another, to do the thing first upon which all the rest depends, to accomplish the most for a given number of steps.

It will be at once said, "But they do not wish to be told, they like to spend time in trifling." Possibly; but it is human nature to enjoy results, to see something done and not forever doing.

My point is that the cost of living is greatly increased by the neglect of the householder to estimate

carefully the amount of time it should require to accomplish the end arrived at and the waste at every step of the day's work. Until better habits, business habits, are brought into the household we must allow about twenty per cent excess over a rational estimate in actual labor, and at least as much more for inefficient labor.

For the ordinary city household where cosmopolitan standards are adhered to, and where there are children and social duties, it is estimated that the sum paid for wages should be one half that paid for rent or what would be paid if the house were not owned. In many cases, in fact in a majority of houses renting for three hundred to eight hundred dollars per year, two thirds the rent is usual; and if the mistress does nothing herself and is not a systematic business woman, the rule should be that the wages paid for all the work about the place, temporary as well as permanent, should be equal to the rent. This may be lessened in two ways—by greater simplicity, or by the members of the family sharing in the duties.

It is hoped that statistics may be gathered on this point as a basis of confirmation or refutation of the charge that too much of the income is spent on furniture and bric-à-bric and too little on the care of them.

Sanitary science demands freedom from dust, quick removal of all refuse, and absolute cleanliness. This

means time and strength as well as constant watchfulness.

The other operating expenses,—fuel, lights, express business, fares, stationery, water-tax, and newspapers,—those things that are not permanent, but go to make the comforts of life,—should be kept in amount equal to wages, for the more servants there are the more some of these expenses will increase without corresponding increase in satisfaction. A large part of the present cost of this class of household expenditure is due to an increased speed in running. In the test of the new British cruiser "Highflyer" it was found that with a speed of 12½ knots per hour 2135 horse-power was required, but when she was run at 20.1 knots the horse-power was 10,344, or nearly five times for an increase of less than two times. The greater the speed the more rapid the increase. For instance, it required more coal to drive the cruiser 20.1 from 19.4 knots, an increase of only .7, than to drive her the steady rate of 12½ knots. In our household life we are living at the rate of 20 knots an hour, with the consequent wear and tear on the machinery and without realizing the necessity of increased outlay if the machine is to be kept efficient.

Much of the expense complained of in modern plumbing is caused by the neglect of the most obvious precautions.

In no other department of household life than in the care of details is the contrast greater between the old-fashioned housewife and the mistress of the modern apartment, and in no other line is there so great need of applied science,—that science which cannot be learned from books, but which women must acquire or resign their position.

In engineering science a careful study is given to reducing friction in order that a given amount of power may yield the calculated force. In the household the "running" of the house is the place where the friction is greatest and where it will pay most to give thought to the reduction of the wear and tear.

In regard to fuel the sanitary view must be the first to be taken. The house must be so evenly and thoroughly heated as to preserve the health of its inmates; and since their circumstances vary as to age, habits, occupations, clothing, etc., each must be governed by these requirements, only there must be a recognition of these needs and not an ignoring of them. The heating-plant is the heart of the house for eight or nine months of the year, and must be looked after by the most intelligent and responsible person in the house,—one who understands the chemistry of combustion and the mechanics of draft. The coal-bill might be reduced by one half in most households and the health doubly secured under these circumstances.

One hundred dollars should be ample for heating a house which rents for a thousand dollars, and two thirds that sum for one which rents for five hundred dollars. The tenement at twenty dollars a month should be made comfortable with twenty-five dollars a year.

CHAPTER VI.

FOOD.

"Half the cost of life is the price of food."—ATKINSON.

"Wherefore do ye spend money for that which is not bread, and your labor for that which satisfieth not?"—ISAIAH lv. 2.

"Courage, cheerfulness, and a desire to work depends mostly on good nutrition."—MOLESCHOTT.

"The removal of the predisposition to disease is the most thorough-going way of making all infectious disease impossible."—HUEPPE.

NOT all other influences put together can equal in profound effect upon the welfare of the household that exercised by food and the attitude of mind regarding it. The well-nourished child is a happy, strong little animal, making brain and muscle and nerve for future use. The well-nourished adult is a hearty, efficient member of society, contributing his share to the common stock of public good as well as enjoying his own work and pleasure. There is little fear of disease for either child or man, since the best prophylactic is a generous store of blood-corpuscles both red and white. The human body in normal condition has a well-drilled army of "phagocytes" (white blood-corpuscles or leucocytes) to which the

man needs to give no directions. But if he neglects to take suitable food or to keep himself warm, if he becomes frightened or takes drugs, his faithful army is paralyzed and the enemy finds easy entrance. The condition of this army, like that of any other, depends on its commissariat. If the food-supply is just right, the soldiers are vigorous; if it is wrong in any particular, they are weakened. Nothing can take the place of food in the human economy. Therefore the poor man is justified in spending two thirds of his income, if need be, for food. But over-nutrition is as dangerous as under-nutrition. The protecting army may be incapacitated by indulgence in food, may be poisoned by ptomaines or narcotized by alcohol or tobacco. The body tissues may become weakened under the strain of excess, and irritability, disease, and death may follow. Food habits should be formed by young children under careful guidance. Until there is a generation which is well trained in this matter very little progress in the use of food as a means of securing human efficiency can be made. So long as food is looked upon either as a disagreeable necessity or as a means of merely sensuous pleasure the child will grow up with whims and fancies which will prevent the best physical development.

For the human race as a whole it has been shown that at least half the cost of life is the cost of food. Food is the essential condition of life, and the race

instincts in regard to it are so fundamental that as a rule only stress of circumstances affects any sudden change. The growth of new food habits is a gradual, almost an imperceptible one in all nationalities, because of that instinct of self-preservation by avoidance of the unknown which was essential in the early stages of race development. Only since knowledge has replaced instinct, and readiness of adaptation to environment has produced cosmopolitan man, can there be said to exist a science of nutrition which has been founded on a study of the food habits of a great variety of peoples under a great variety of circumstances and on the results of experimental feeding of animals.

As a result of these studies it may be briefly stated that a condition of complete nutrition should be aimed at but not overstepped. It is the belief of most students of economics and sociology that it is the overfed among the nine tenths not submerged who are being eliminated by the various diseases of modern life,—apoplexy, heart-disease, Bright's disease, etc.,—and that the sterility of the better-placed portion of the community is largely due to the plethora of food and drink which induces the eating of more than the system can stand and vitality is consequently reduced. "Our appetites are stronger than they need to be under existing conditions."

Unless some form of restraint is imposed in place of that asceticism and frugality with which religious ideals safeguarded the more intelligent classes in the past, the present type is likely to die out and "a more primitive man will come forward to try anew to solve the problem of the highest civilization."

Self-evident propositions may be stated as follows:

Food is that which supplies the body with such substances as are necessary to preserve it in health and to supply it with energy for daily work or play.

Food materials as a whole should contain those substances in sufficient quantities and in suitable proportions.

Food materials should not contain anything injurious, nor be so prepared as to develop any injurious qualities.

Food materials should not be so stored or packed as to produce by their decomposition any secondary substances which are in the least degree detrimental.*

Good health is essential to efficient production of energy and to the enjoyment of the good things of this world.

Standards of living must include the idea of efficiency if man is to live up to his opportunities.

Food is not only the workingman's capital, it is the cultivated man's bank-account.

* In addition, the mode of preparation, combination, and serving should be such as to increase the enjoyment of the food without rendering it less suitable for its purpose.

It is because I believe in the possibility of control of even economic conditions by ideals firmly held by a sufficient number of fathers and mothers (who alone, according to Patten, count for much in race progress) that I urge so strongly the dissemination of what scientific knowledge we have, and the importance of gaining yet more facts about food and its part in human welfare

The moment when a family is released from the bondage of race instincts and habits as to food, in that moment danger begins for them. Unrestrained appetite in this as in other directions leads to loss of efficiency; therefore education must come to the rescue.

If the proper study of mankind is man, then the study of that which makes him a capable, efficient member of society and not a wretched dyspeptic or a shell of walking contagion is worthy a place in any curriculum.

In no other department of household expenditure is there so great an opportunity for the exercise of knowledge and skill with so good results for pocket and health. No item of expense is so fully under individual control. The house stands out for every one to see. Clothes are scrutinized and commented upon; if attempt is made to economize in fuel, light, and wages, it is sure to leak out and be put down to a niggardly soul. But in most families there is ample

margin in food from which to take a respectable slice without harming any one. If the family is a close corporation, no one will be the wiser for the time and thought which the mistress puts into an æsthetic as well as nutritious table. If the typical servant is required to follow the same plan, she will probably rebel and give warning rather than live with a mistress who measures the sugar and counts the potatoes, so hopelessly wasteful have our habits become.

It is not the food actually eaten that costs so excessively, it is that *wasted* by poor cooking, by excessive quantity, and by purchase out of season when the price is out of all proportion to its value. Good judgment as to the amounts to be prepared, as to the harmony of the meal, the blend of flavor; as to the right appetizers; and good humor and cheerful conversation, with the most attractive setting and perfect serving, will cut down the cost of almost any table one half. Many seem to hold the idea that hospitality requires the setting of a double portion before the guests, and this alone doubles the cost of food in some families. It may be rightly said that the knowledge of this perfect table involves expensive training on the part of the mother or mistress, and that it will be cheaper for the family to go to a hotel where the *chef* is paid to do this for a thousand people. True, this is what a large number of American citizens think, and if it were not for the increased death-rate

and the alarming prevalence of nervous breakdowns and insanity we might allow the mere economic conditions to rule. But there is another side: fancies and flavors and combinations may be better provided for by one who has had long experience of the tastes of the family than by the *chef* who suits the average of a thousand. Also the health and manners of children may be more carefully watched at home. And if bright faces and merry hearts gather about the home table in fresh cool air, sweet with the favorite flowers, will not the quiet, the restful atmosphere soothe the tired nerves more than the strange faces, the glare of lights, the rattle of dishes of the restaurant or well-ordered hotel—even though the noise is drowned in music?

In sociological work is it not considered a great step when a family is persuaded to gather as a unit about the table instead of each taking from the bakeshop or the cupboard that which will serve to keep soul and body together? No other symbol of comfort and well-being has been so universal as the family table, and yet many intelligent women are advocating a reversion to primitive ways, thus doing away with a civilizing agency.

The home cannot be looked upon as an eating-house, as a laundry, as a sleeping-place; it is the school of life, and anything which renders it more efficient is worth paying for. The cost in money or

time is not to be for a moment grudgingly cut down. What if the parents spend all they can earn, is it not well invested in the next generation? The cost of living must be measured by the results in flesh and blood and brain, not in houses and lands. Hence we say: the ideals toward which the family is striving come first into discussion before the expenditure can be rightly judged. The home is for the children, not merely for their nutrition, but for development of character; and that must be the only criterion of its true economic value, not in dollars and cents, but in the character of the men and women which are the product of the homes just as truly as the cloth is of the loom. And it is this point of view which must justify the maintenance of the small group, which we call the family, as the unit of the social state.

Everything about the home must be judged by its bearing on character. An experienced charity-worker objected to the New England Kitchen on the ground that she could not replace the educational and disciplinary value of cooking for her poor women.

It is in the deeper meaning that excuse must be found for keeping up the custom of eating at home, for it cannot be justified on economic grounds. The family table is an educational factor of greatest importance to the children. There, as nowhere else, are inculcated the virtues of self-control, self-denial, regard for others, good temper, good manners, pleas-

ant speech. The children's table presided over by the ignorant maid and the hurried service of the adult has much to answer for in modern life.

Whatever it may cost, however uneconomic it may seem,—in the wider view of the aim of all living, let us keep the family table even if much that is set upon it comes from outside; enough should remain to permit of its educational, æsthetic, and ethical value.

When housekeeping is reorganized on a business basis the present waste and drudgery and dirt in the house-kitchen will be abolished, and along with the soap-making will go the soup- and bread-making—the heavy kettles and greasy dishes. The cleaning of fowls, the trimming of vegetables will be done out of the house, and that *bête noir* the garbage-pail will be reduced to manageable dimensions. More refined ways of doing the necessary tasks will make the work a pleasure and yet, as I believe, will keep the family circle intact.

I do not wish to be understood as relegating food to the realm of mere necessities, but I do maintain that the relation of the food-supply to health must not be overlooked or thrust out of sight.

The difference between food as an animal need and as a source of pleasure as well may be likened to that other process of combustion and source of heat, the fire on the hearth. The black air-tight stove gave the necessary heat and was more economical of fuel

than the wood-fire against the chimney-back, but with the latter comes a sense of cheer, of companionship, of worship, that is worth all it costs.

It is this same sense of pleasurable comfort, of an actual accession of strength, which is given by a suitable meal in a harmonious setting.

As the useful heat of the fire is not wanting, however great its beauty, so the useful fuel-value of the food must be considered under all the accessories. There is here the additional variable, the power of the body to utilize the bountiful gift. The very charm of the surroundings helps to this provided there is not positive harm in the ingredients or their combination.

Much of the present cost of food is in the exceeding cleanliness necessary in dealing with the animal foods which are so liable to harmful changes.

The right attitude of mind toward food will make its choice, preparation, and serving that which in earlier times it was—a worship,—and the office that of a priestess. It was not by chance that so many religious rites were connected with eating.

It served to impress the importance of the right view of food upon primitive peoples.

It is just as wrong to ignore food or to hold it of little value as to consider it too much. The health of the human body means sufficient food if the individual is to do his or her work in the world.

Mrs. Bosanquet writes: "Women are supposed to be able to live on a much less wage than men of the same social standing, and this is largely because they accept a much lower standard of living. That is, they are content with less food, less comfort, narrower interests, and less recreation; and this reacts through their impaired vitality by making them less efficient. 'The woman needs less' it is always argued as a reason for woman's lower wages, but she needs less only in the sense that it costs less to maintain a low physical standard than a high one."

Bullock* says there are five ways in which fully one fifth the money expended for food is absolutely wasted, while the expenditure often fails to provide adequate nutriment. In this manner ten per cent of the income is squandered in —

1. Needlessly expensive material, providing little nutrition.
2. A great deal thrown away.
3. Bad preparation.
4. Failure to select rightly according to season.
5. Badly constructed ovens.

This waste if checked would give an increase of income which would appreciably lift the family to a higher plane of efficient life.

I am so often asked for definite menus and for a list of articles of food which can serve a family for a

* Economics.

given sum that I am forced to the conclusion that there is very little knowledge as to what good food is or what it costs; that the decision as to what to furnish to the table rests upon what other persons are known to buy rather than on any individual judgment. This is either childish imitation or foolish following of fashion.

Even the writers of cook-books and teachers of cooking have too often followed instead of led the public.

Scientific investigation is needed in this respect as much as in any other. Before we can make definite statements we must have definite knowledge. Most of the work done by the United States Government has been among those supposed to waste most in food materials, those with an income less than five hundred dollars. What is more needed is information as to what it costs to live well for a family with fifteen hundred to three thousand dollars a year; for healthful, appetizing food at a sum not exceeding twenty-five per cent of the income.

When we get budgets from a large number of these families we shall be able to formulate much better than now the rules for the expenditure of this part of the income.

Extensive studies of the composition of food materials and of the amounts consumed by man under widely differing conditions show that sufficient raw food material for health and production of energy

may be secured anywhere in America within reach of a railroad for nine to ten cents per day per person, provided the appetite is strong and natural and not influenced by whimsical fancies. Thirteen to fifteen cents furnishes good fare for intelligent workmen whose wives understand both buying and cooking, and also serves for large establishments kept at public expense, such as prisons and almshouses.

Eighteen to twenty-five cents per day per person is the most which, according to our estimates in Chapter III, should be spent by those whose incomes are one thousand to fifteen hundred dollars per year. And the knowledge now available for the housewife will allow her to do this satisfactorily, *provided* that the aims of the family rise above the pleasures of the palate.

This sum is sufficient for collections of three hundred to five hundred persons under one roof,—schools, hospitals, and institutions supported by charity,—again provided that the right spirit of cooperation exists and that a scientific attitude of mind can be maintained.

Twenty-eight to thirty cents is the maximum limit for such institutions and for families who are eager for the higher pleasures of living and have not money enough for both.

Thirty-five to forty cents spent with discretion is ample for colleges, paying hospitals, private schools,

and private families if the purveyor, cook, and serving maid, each and all, do their duty *after they are furnished with the proper appliances.*

Only when the income of a family of five individuals, including servants, rises above four thousand dollars a year should an expenditure of fifty cents per day per person for raw food materials be looked upon with complacency, unless the momentary pleasures of the palate are preferred to the lasting pleasure of health and the satisfaction of the higher nature.

From what has been said it will be seen that the æsthetic value of the table cannot be realized unless the highest intelligence in the house makes it his or her care. I must say that some of the most perfect examples I know are those in which the man of the house "puts his mind on it." I believe it would be greatly to the advantage of the health and happiness of the world if this part of the housekeeping were for a time done by men, for then they would systematize it as they have systematized the various industrial pursuits which were once household occupations.

The difficulty would be that they would not be satisfied with the economic waste of using as much effort and time to prepare food for four as is needed for fourteen or forty, and the common dining-room would prevail.

The American woman has been much slower than the American man to grasp the meaning of the

proper setting by which to increase the enjoyment of food. The club table is often a model feast, while, since she no longer cooks the meal herself, the housewife has washed her hands of all care for the essentials and wasted her energy on the foolish abundance of entrées, sweets, and bon-bons; she has not learned to keep the air of her dining-room cool and fresh and has not taken pains to make the meal an intelligent feast; above all, she has not trained the children to eat for life and health, but allowed them to sacrifice both to mere habit and whim. As a result her expenses are large, her health poor, her children peevish, her husband makes any excuse to dine at his club, and she longs to give up housekeeping and board.

Most of the women who have written upon household economics have shown how smoothly life would run if there were no kitchens, and have advocated caravansaries where a common dining-room should serve as an amusement-hall.

If it were only the drudgery of preparing the three meals a day, this would be a safe solution, but the efficiency of the individual depends almost entirely on his food. It matters little whether his house has a Gothic window or a Mansard roof, whether the lining of his coat is of silk or of cotton, as to the number of miles he can walk or ride, or the business he can transact, but it does matter whether he is able to extract the full number of calories from his breakfast.

Let food and its accessories be once established on a standard of health which means latent power, and not upon fashion, and the college president will be no longer able to include cooking with millinery in the same ignoble category.

The dressmaker and the milliner are chosen with great care, and many visits are made to the shops to select fabrics and trimmings; but the cook who is responsible for the upbuilding and preservation of the body is chosen haphazard and the food ordered by telephone.

Not until it is generally known how much the food has to do with human welfare will it receive the attention it merits.

Let the housewife once grasp this idea and she will fit herself to carry it out.

Let the young woman who has longed for a career in medicine turn her attention to keeping sickness away, and so devote herself to bringing up the sum total of human happiness.

Patten says: "We now have a fair chance to test the theory of the dominant influence of scientific habits of thought on public opinion. Dyspepsia is becoming prevalent. A dyspeptic is in the same uncertainty with regard to the effect of what he eats that the primitive man was in regard to his ability to get something to eat. The result is the same—a victim of superstitious fancies and a user of nostrums.

If all men became dyspeptics, superstition would be as rife as it was in the middle ages." The race is to be helped, not by argument, but by a relief from disease, and this sanitary science is trying to accomplish even against the will of the victims.

The following table taken from No. 16 of the Rumford Kitchen Leaflets may be helpful to those desiring to study the cost of food.

TABLE I.

FOOD SUBSTANCES RICH IN

Nitrogen.	*Starch.*	*Fat.*	*Sugars.*	*Salts, Acids, Flavors.*
Cheese	Rice	Cheese	Molasses	Vegetables
Beans	Wheat	Meats	Syrups	Fruits
Peas	Corn	Eggs	Preserves	Green Relishes
Eggs	Oats	Milk	Fruits	Condiments
Meats	Barley	Corn		
Milk	Rye	Oats		
	Beans	Wheat		
	Peas	Rye		
	Potatoes	Barley		

TABLE II.

FOOD MATERIALS IN RELATION TO COST.

For 5 to 15 cents per person, daily, the food may be chosen from	*For 15 to 30 cents per person, daily, the food may be chosen from*	*For 30 to 100 cents per person, daily, the food may be chosen from*
Potatoes	Beef and Mutton or any meat not over 25 cents per pound	Choice cuts of Beef, Mutton, or other meats
Rye Meal	Wheat Bread (purchased at the baker's)	Chickens
Corn Meal	Suet	Green Vegetables, Garden Stuff, and Vegetables out of season
Wheat Flour	Butter	Preserves
Barley	Whole Milk	Confections
Oats	Cheese	Cakes
Peas	Dried Fruits	Tea
Beans	Cabbage and other vegetables in their season	Coffee
Salt Codfish	Sugar	
Halibut Nape	Fish	
Any meat with little bone, at 5 cents per pound	Bacon	
Oleomargarine	Some Fruits in their season	
Skimmed Milk		

CHAPTER VII.

CLOTHING IN RELATION TO HEALTH.

"The pursuit of things fashionable for the sole reason that they are fashionable is not an exalted occupation and is, indeed, I think a somewhat sheeplike attribute.—FREDERICK TREVES.

"One of the strongest human wants is the society of one's fellows."—BULLOCK.

THE cost of the clothing, like that of the house, depends more often upon what impression it is desired to make upon the outside world than upon the true office of clothing, namely, to preserve the health by protecting the body from sudden changes of temperature. Whatever may be the cut and color of the outside layer, the real garments should fulfil this requirement, and the money necessary to secure this should not be used for other purposes.

In our present views as to the nature and causes of disease, temperature plays an important rôle.

We believe that a well-nourished body kept at its normal temperature is exceedingly resistent to if not proof against ordinary forms of disease. Bodily temperature is chiefly maintained by food and cloth-

ing, and the one supplements the other. The one furnishes fuel, and the other saves it.

Insufficient food or insufficient clothing may permit of a lowering of the temperature of a part or all of the body so that disease may gain a foothold.

The first office of clothing, hygienically speaking, is to furnish an outer layer over the body skin which shall protect that organ, made delicate by generations of protection, from sudden changes of temperature, so sudden as not to give the stored food-supply time to respond to the stimulus. It is evident that this layer should be spread evenly over the skin, and so lightly as not to interfere with free bodily movement, and that it should be quite pervious to air, since the skin is more than covering and has offices to perform in the body economy akin to those of lungs and kidneys. It is not the insufficiently dressed person who catches cold, but the superabundantly dressed.

And yet direct access of cold air should be prevented upon such exposed blood-vessels as occur at wrists and knees.

Recent experiments indicate that several layers of different substances and a loosely woven texture are most advantageous.

Love of display, of that color which will attract attention, is an instinct inherited from our savage ancestors. An attribute of the early man, it has in the course of evolution reached the woman. As was

natural when women were left without the home industries which served as absorbing occupations for them, they began to turn their attention to themselves and to allow free play to an untrained fancy in the clothing of themselves and their families. With the factory cheapening fabrics and becoming unscrupulous in the use of evanescent dyes, nearly all articles of clothing used for outside display have degenerated, and waste of money in this direction by those who need it for other things has become shocking. No other form of sense gratification seems such a mania with women; their freedom from household occupation has certainly not been well used for the most part. It is not uncommon to find a woman who has sacrificed the well-being of herself and her family to a love of display.

Here again the school must come to the rescue and prevent the next generation from making the same mistake.

The argument is used that it makes business to cater to this mania; but it were better that business should not be made for the aggrandizement of the few than that the many should have their ideals debased.

Whatever may be said of the morality of a factory for the making of idols for sale in the East, or of printing cloths of barbarous designs and color for savage islanders under the pleas that they want them

and will have no other, in a civilized country those who cater to the wants of its own citizens should be forced by public opinion to use their capital and their skill in ways which will elevate and not degrade the ideals of the people for whom they work.

No great or sudden revolution can be expected, but a strong pressure can be exerted if intelligent persons will give time and thought to the study of these things.

Protection by clothing from the rigors of climate is a distinct advance, as it enables more energy to be used for other purposes; but excess of clothing leads to tenderness of skin and delicacy of appetite, which ill prepare the individual to surmount the obstacles nature has interposed.

Clothing in excess of physical needs must meet æsthetical needs which are as real; when a garment does neither, but is a source of discomfort to the wearer and displeasure to the observer, it may be said to have little value.

The habit of balancing the various utilities of clothing would save many a weary hour of stitching and shopping.

This is not a treatise on hygiene, but a discussion of certain points in sanitary science which bear on cost of living; and in the cost of clothing we must include the æsthetic side, just as was done in the case of house-furnishing and of food. In this there is an

unlimited range of possibility, and only certain ideals rigidly held will save the exchequer from being unduly depleted on this account.

Each family has ample room for choice which æsthetic sense shall be gratified after the hygienic essentials are satisfied.

It may be clothes, it may be food, it may be pictures, it may be furniture, it may be travel, but in our families it cannot be all of them. When this choice is guided by principle and not by fashion the family will rest secure in their reasons for a given action, and not be troubled by outside opinion.

With increase of knowledge it will be possible to combine the requisite of health and beauty in such a way as to lead to economy of time and money.

The proportion of the income which is due to this part of life may be estimated at from five to fifteen per cent for the wage-earner whose income is ten to twelve dollars per week (six hundred dollars). Thirty dollars will go a long way in providing raw material for the family if it is made up at home and if a wise selection is made of durable materials of true bargain or mark-down sales. For the clerk or teacher on a salary of twelve hundred dollars ten per cent will keep the family in tidy condition for school and church and holidays.

The most difficult case is that of the family who are striving to keep in society and who must spend

for gloves, carriages, and the costly trifles which make solely for appearance and the absence of which is not forgiven. Unless the income rises above twenty-five hundred dollars, fifteen per cent will go with the greatest rapidity, and home-made clothing will not pass muster. Nothing is more humiliating than to be obliged to stay away from a pleasant occasion because no suitable clothes are on hand.

Here again knowledge pays; for if there is an æsthetic touch, a personal atmosphere, an ideal, not a slavish following of fashion, a person may be well dressed with very small expense. Fashion herself will approve, and society not shrug her shoulders. It is the thoughtless dowdy she disapproves, or the purchased, ready-made air. It is not money but knowledge and care which tells. One color is not much more expensive than another, and one style does not require much more cloth than another. It is the perfection of detail, the fit, the perfect work, the care far more than the money-cost which shows taste. The decadence of the use of the needle, the lack of comprehension of what makes dress an ornament, result in the hideous combinations seen on our streets, and in a waste of money which might be spent on better things.

Clothing from the standpoint of health is shelter, protection from heat and cold, and is a corollary to food. In cold climates the warmer the clothing the

less food is required. A layer light in weight spread evenly over the body so as to protect, not impede, so loose in texture as not to prevent free circulation of air, soft enough not to irritate the skin several layers of different rather than of the same materials, will accomplish the purpose.

These are the essentials which the devotee of hygiene will secure first. Outside is the layer which we show to the world with an idea of enhancing our attraction to others. We can add pleasure to use by appearing in harmonious colors and graceful forms, and we can by the right selection add to our appearance. This is right and proper if, as is the case in the architecture of the house, it does not cripple the more important life of the soul.

But worse than all else in its effect on the morals is the same lack of care in preservation of material and garments which is seen in furniture and food. The tendency is to use everything as if this were the only time it would be needed.

CHAPTER VIII.

THE INTELLECTUAL AND EMOTIONAL LIFE; SATISFACTION OF OTHER THAN MATERIAL WANTS.

"The education of the near future will focus upon the feelings, sentiments, emotions, and try to do something for the heart, out of which are the issues of life. It is this side of our nature which represents the human race."—G. STANLEY HALL.

"It is not what we lack that makes us discontented, but what others have."—HORACE ANNESLEY VACHEL.

THE intellectual and emotional life includes the exercise of those faculties which distinguish man, and the cultivation of which is held to advance what is known as civilization.

The barbarian sees mountain and stream, the tender green of spring, the rich red of autumn, but he is not moved to action by the emotions they excite. The holiday crowd in a picture-gallery sees the colors and forms on the canvas, but the meaning so clear to the art-lover is not for them.

Great thoughts of great men have power to move only those in whom there is an answering vibration.

If the tendency to wider separation of the extremes

of society is to be checked, and a more general diffusion of comfort and æsthetic ideals is to be seen, the advance must come from that portion of society which we are considering, those to whom the treasures of past ages are more valuable than present luxury; to whom the possible ideals of the human race are dearer than probable wealth for their children.

When money ceases to be the most valuable possession, its baleful power will be gone and it will become only a means of satisfying the needs of the emotional and intellectual nature, instead of ministering to base passions and ignoble desires.

The fixed determination to set aside one quarter of the income for the satisfaction of the needs of man's higher nature, either in the present or in the immediate future, would go far toward cutting off the arms of the octopus which threatens to squeeze the life out of the American republic.

If only the college, the university, the school, will give the right direction to this movement and not remain so hypnotized by the past as to neglect the present opportunity!

The intellectual and more refined expressions of the emotional nature are those most in need of cultivation in America to-day; a more truly American art and literature, more refined living, with more thought given to the meaning of life, to the object for which all exertion should tend, more thought for the manner

of accomplishing a given result, less for the money value of it.

For an ideal, any sacrifice is pleasure. For an ideal, men will strive and win success, when otherwise they will sink into inaction. Ideals, then, men must have, and in the division of the income a place must be given to them and a portion set apart to minister to that side of human nature.

One great advantage of this recognition is that the young couple, whose interests we are considering will pause, before buying an ornament, or a picture, or a piece of furniture; and will have a chance for decision as to the permanent value of the object and its meaning to them. Anything purchased with thought and care and placed to meet a need of the person has a value, even if better taste and wider knowledge would have discarded it.

It is the caterer to these blind instincts who should be the object of our wrath, the man who, to make money, deliberately manufactures frail articles, flimsy imitations, not worth the carrying home. If some wave of reform could cover this class of goods and remove temptation, an immediate improvement in the condition of the masses would be seen.

To those who should know better, whose college education should have (alas, how seldom it has!) taught them to know the best, we must appeal to spend this part of their income on principle, no

matter what the object may be: books, pictures, ornaments, church or charity, let it be a *conscious effort toward a higher and a fuller life*, toward what we believe may be the highest civilization.

Entire freedom of choice should rule in this as in other departments, only let it be *choice* and not *drift*. Let it be what we desire with conscious longing and not what we happen to see in the possession of others that animates our endeavor.

It is the attitude of mind toward the objects with which we surround ourselves, rather than the objects themselves, which makes or mars our welfare. For this reason, the teaching in the public schools should include right ideals of life from the material point of view and right notions as to values. A whole generation could be elevated with one concerted effort through this powerful agency.

If we read the history of the rocks and seas aright, each animal race has risen to a culmination when the food-supply and general environment became such as to permit of it and then has declined and passed away.

The conditions under which the human race are at present living lead us to ask most seriously if such is to be its fate. There is, however, one difference between animals and men. Men have a power of choice, of looking into the future, to which reference has so many times been made. There is a possibility

that by this power of conscious choice, of present restraint for future good, man may rise to a greater height and persist for a longer time.

"Evolution,* therefore, seems to be under better control in regard to the human race. No longer is *environment* everything, it is now dominated largely by intelligence and choice, and this appears the only hope that man may escape the fate that has so far befallen each dominant species which has left footprints on the sands of time. . . . This faculty of choice may enable us to resist the appetites and inclinations which, although raising us in the animal scale, tend to bring us to the brink from which we shall fall."

The feeling of oneness, the altruistic movement so evident all over the English-speaking world, is evidence of the check upon the selfishness of individual freedom and that the time has come for a larger race development. Therefore this portion of the income must have a larger share in the twentieth century than in the nineteenth.

It is true that the same element of conscious choice lies in all the other directions of expenditure; nevertheless this division is made for the purpose of emphasizing and calling attention to the importance of recognizing it. Certain it is that selfish gratification brings its own punishment even if it is not immediate.

* "Evolution and Effort," by Edmond Kelly, pp. 270–280.

One of the moral advantages of the family life is that of suppressing this one-sided development. The freedom of the individual has its bounds set by the good of the race.

Altruistic instincts, the possibility of giving of one's own to others, can only be satisfied when the income yields more than enough for bare existence.

As in nutrition and all other factors of living, there is the golden mean if we can only find it. Saving for no purpose is niggardly; saving for a possible future and pinching in a real present is unwise and unprogressive; but saving to be independent of charity is essential to true manliness of character, and furnishes the incentive which keeps two thirds of mankind alive. This saving may not be in the form of stocks and bonds and a bank-account. It may be in the form of valuable works of art, of which the enjoyment may be taken as the days fly by; of investment in house and furniture, if only that which is truly valuable is chosen, and not that which is sham and flimsy in construction or of passing fashion.

The best investment any family can make is in the health and education of the children; in surrounding them at the impressionable age with those forms and colors and objects which shall lead them to choose the best things life has to offer, in making possible for them a better life than the parents have had.

At the same time there is danger that the incen-

tive to effort will be withdrawn; and one clear fact stands out through all ages of organic evolution—that through effort alone has progress been made.

The massing of the population in cities has made possible the provision for communistic amusement and recreation to an extent somewhat startling to the moralist. Each suburban trolley-line has its park or lake with vaudeville attractions. The things which make for the satisfaction of the æsthetic, the sensuous, the ethical education or enjoyment of the masses, are now provided in nearly all cities by municipal appropriation or private benefaction. Parks, libraries, picture-galleries, museums, music, baths, have all been added to schools, free classes, and public lectures.

The difficulty is to arouse an appreciation of the advantages given, to educate the taste of the people so that they will use aright the things provided.

Judged by the amount of money spent, the mass of people have far more of what stands to them for comfort and the good things of this world than ever before, but it is questionable if "health and peace to enjoy them" have correspondingly increased. But they take both their ordinary life and their pleasure in large groups, after the fashion of the primitive communities; they follow the crowd; even when the income permits wider choice, the attraction of numbers is not lost.

"For a large number of men and women who are not devoid of taste and who are capable of serious thought, the first necessity of life is not to think, but to live. The pleasure of *looking* at a play is one of the secondary pleasures; the pleasure of *going* to it one of the primary. . . . The pleasures on which they spend the most money are not those which they think the highest, but they are certainly the pleasures which they practically feel to be the most necessary." *

The question confronting us is, shall the same conditions of receiving the pleasures of life from the hands of the state be carried on into the more prosperous families, or is there a good and sufficient reason why each family should retain in its own control the needs of the intellectual life as well as of the animal? Why is it, indeed, that it is held so essential that the unintelligent masses should have certain pleasures, even though they may not be able to provide them? Is it not that through them they may be roused to greater exertion, to a desire for more than it is in the power of the state to give, or than it is for the welfare of the citizen that it should give?

What then is the "something" behind it all? Is it not possession, individual ownership, which in all

* "The Incongruities of Expenditure," from *Saturday Review*, in *Littell's*, June 24, 1899.

races marks an advance—mine to do with as I will? Mine if I will work hard enough to get it—mine own home, mine to control, to experiment with, mine for success or failure? This individual ownership seems to have been the incentive which has led to the building up of our civilization; are we to throw it away and go back to the communal life of primitive peoples?

That it is a fundamental race instinct is shown by its appearance in the second year of every child's life. It is the dawn of the higher intelligence to be followed by imagination as to what may be done with the things possessed. As soon, therefore, as the family income reaches eight hundred dollars a year, if not before, the principle of paying for pleasure and edu cation and comforts should be made a rule if for no other reason than because of the value of necessary cultivation of choice, of self-denial in one direction, of gratification in another.

So wide is the range that there is ample opportunity for the cultivation of all the faculties possessed by man.

Health of mind depends upon conscious effort just as truly as health of body. Children should be trained early in this direction, and in their purchases be made to feel that objects contribute to the fund of mental enjoyment.

Life-insurance and savings may well come in this

portion of the income, since they are the means of that sense of independence which the race has been striving for; only let not the mania for saving go so far as to cripple the present life; let that fund grow from the unexpected surplus. A nest-egg should be always retained if a sense of security and that peace of mind which John Locke was thinking of is to be continued.

The spirit of helpfulness toward a less fortunate neighbor belongs in this class and has existed in various forms, religious, charitable, and just simple help which one poor family gives to another. This spirit of true altruism exists far more than one who has not been brought into contact with it would believe.

A family with troubles enough of its own will help a friend to the extent of its last dollar. I am more often called upon to advance money to my employés to help some other person in distress than for their own needs. Nor do I grudge the bicycle to the boy who had much better walk, according to my notion; nor even the piano to the girl who should be doing housework. It is all a part of the evolution of a love of the beautiful and the pleasing, which can be rightly cultivated under wise direction.

I do feel, however, that those who have learned to be wise owe it to their less fortunate neighbors to give them the means of education, which can best be

done in the public schools. These buildings should be models in form, in color of walls, in decoration, in pictures and casts, and copies of these should be made available for the homes to which the children go.

Above all, the beauty of cleanliness, the most costly of all beauty, should be exemplified in schoolhouses, and the means for attaining it fully shown.

Each householder has a duty in this respect also to the employé under his roof. Space and opportunity should be given and requirements made which can be carried out in the humbler households which they will eventually form. Only no special method of personal gratification must be *forced;* allow them to choose, but guide the choice. The school is, however, the agent of the first consequence in exerting a profound influence upon the homes of the next generation.

CHAPTER IX.

THE ORGANIZATION OF THE HOUSEHOLD.

"It is the present duty of the economist to magnify the office of the wealth-expender, to accompany her to the very threshold of the home, that he may point out with untiring vigilance its woful defects, its emptiness caused not so much by lack of income as by lack of knowledge of how to spend it wisely."—EDWARD DEVINE.

"A woman has courage in great things and fails in small crises."—KATHERINE DE FOREST.

"The greatest of all obstacles to social progress is lack of directive intelligence, of skill in management."—LUCY M. SALMON.

"Education is no doubt a process both long and toilsome; but it is withal a hopeful process and forms the basis of modern democracy."—A. F. WEBER.

THE great industrial and economic questions of the twentieth century centre about household management, and the expenditure of half the income is a vast sum to be in the hands of any one class of persons. Just as soon as the home is raised to its proper position and is recognized as a business, its director will be required to have knowledge and skill in some measure commensurate with the interests at stake.

The higher purposes of home life must come into sight and be the dominating factors unless the present civilization is to pass away and to give place to a very different order of things.

Certain it is that if the full effect of the present lines of human development is to be seen the wave of progress must lift the household out of the slough of despond into which it has sunk, and put it upon a level with the other elements of progressive civilization.

Before the ethical development can take place a material advance must come. None of the higher virtues can thrive in an atmosphere of so much wrangle, worry, and disorder as the house-roofs cover but do not hide, any more than fine physical bodies can be produced by such carelessly prepared food and such selfish indulgence of momentary impulses as are seen at most tables.

The maintenance of the household demands money for rent, food, and clothes, time and intelligence for the decision of how that money shall be spent and in what form the goods shall be presented and a spirit of unity and helpfulness in all directions to make the whole successful.

If there is a common aim in the life of the group, one sufficiently strong to bind them together, the small self-denials necessary will not be irksome. Each will do his part toward the attainment of this

common end and not try to make as much work as possible for the other members or to frustrate their endeavors.

It is this loss of unity of purpose which has permitted the family to fall apart and has caused the collection of individuals under one roof to assume the character of a boarding-house in which each member feels at liberty to complain of every other and to exact service of every other without giving in return.

If there is not to be found some ideal which will again serve for the binding cord, then we may as well take up life in single cells or in huge caravans.

If women are unwilling to acquire that knowledge of scientific and business principles needful for the organization of the twentieth-century household, then the extension of the apartment house where the men do most of the real housekeeping (the janitor, the choreman, the elevator-boy) is inevitable, and possibly, when the woman becomes quite passive, engineers will turn their attention from bridges to stairways, from tunnels to cellars; the chemists from patent medicines to food; the architects will think less of mere outside ornament and more of inside arrangements for useful purposes.

Then the work of the household will be a knowable quantity and can be planned for. The housewife now says it cannot be known, that it is the emergencies, the unexpected, which cannot be counted upon,

but I maintain that the unexpected happens in all mundane affairs, and that the most substantial structure, the most intricate factory, takes it into account.

There is no way out except the frank acknowledgment that the present household is for the most part run on an antiquated plan where there is *any* plan.

The burning question is, where is the Moses who will lead us from this wilderness into the promised land where no one shall slave all day that others may eat and drink, where those who plan and those who execute shall at least understand each other, and where the efforts of all shall bring health and joy instead of misery and death ?

Housekeeping no longer means washing dishes, scrubbing floors, making soap and candles; it means spending a given amount of money for a great variety of ready-prepared articles and so using the commodities as to produce the greatest satisfaction and the best possible mental, moral, and physical results. The very variety of choice is a danger unless knowledge comes with liberty. The ease with which money can be spent, and the habits of living for to-day which that fact fosters, have taken away the incentive to thoughtful foresight and have blinded the purse-holders to the inevitable consequences of savage-like recklessness.

The economic changes which took all interesting occupations out of the home came too rapidly for a

readjustment of habits; women were freed too suddenly and have not yet recovered a proper balance.

It has been said, until it seems not worth saying again, that the reason why the routine of daily living has become so distasteful is because it consists of clearing away débris with no constructive work; that there is nothing to show at the end of the day for all the labor expended. Consider for a moment the work in an ordinary house. Some one rises at half-past five or at six, builds a fire if there is no gas-stove, and proceeds to "get the breakfast." Other members rise at various times; perhaps the parlor and dining-room are dusted and put to rights before breakfast, which drags on until nine o'clock; then dishes are washed, beds made, sweeping and dusting, washing and cleaning and cooking until afternoon; at best it is eight or ten hours before the house is presentable, and then comes dinner or supper, as the case may be, and more work for dining-room and kitchen, and what is there to show for it? Only healthy, happy lives! Fortunate indeed if that is the net result; but how often, alas, does disease or restless fretfulness reward the workers!

In the golden age of household occupation the serving maids as well as the mistress had the pleasure of seeing piles of snowy linen and wool or stores of yarn and candles attest their industry, besides the mere food and cleanliness. The pleasure of seeing

the work of their hands was added to the pleasure of action. As the farmer has his barn of hay, the manufacturer his goods, his money in the till, so they had tangible material.

Not enough account has been taken of this difference in result in the discussion of the reasons why housework is distasteful in the end of the nineteenth century; only those who can appreciate the value of cleanliness and who can look upon a swept floor or a washed dish as a result worth while, who can feel that a meal well digested is of more value than a reel of yarn, can come to feel the interest and delight of the daily routine.

It is like the case of the child at school who will work harder on that which he is to carry home to show than on something which goes into the waste-basket. It is only when childish things are put away and men can look toward the goal and think abstractly, not considering to-day's result, that this element is overcome.

If we could examine into the lives of the householders we know, I believe we should find that those which have contented workers are those in which some results remain of the day's work—fruit put up, aprons made, new curtains, etc.,—and in which the spirit of the mistress has made the cleaning of the brasses, the washing of the windows a fine action, a sort of religion, a step in the conquering of evil, for dirt is

sin. The households where constant change and discontent rule are those in which this spirit of fighting an enemy and laying up stores for the future does not exist. Can we spare the educational, nay, the ethical value of work done in the house?

Not unless we can place our women in the advanced class where they may be able to put aside the merely childish way of looking at things and see the end to be attained as a sufficient incentive. That is why we plead for the right education of the housewife; not that she shall dust her house, but that she shall know how to infuse into the work that interest and enthusiasm which it has lost owing to circumstances over which she has no control. What must be her aim is the health and happiness of those in her care, for happiness means health.

Dirt means disease, therefore the warfare with dirt is incessant. Our wise housekeeper will make this fight as surely successful as possible. Instead of frankly accepting the situation and furnishing with washable material and easily cleansed furniture the housewife in a dusty smoky city is in the habit of using heavy draperies and deeply carved wood as freely as she would if she lived in a clean city. She looks upon plush and velvet as fabrics and not as catch-alls for dust. It is not business economy to put obstacles in the way for the sake of overcoming them.

No thought of the end, of clean wholesome living

to dignify the work, no care for the things one has used! A chair mended by one's own hands has far more value than one from the shop. The old furniture of which we are justly so fond bears the essence of many loving hours in its grain.

Human labor, human thought leaves an impress on inanimate things. Unless one can put this loving touch upon the house, and can breathe into the otherwise dry bones this breath of life, one should not cross the threshold, but betake one's self to a caravansary boarding-house where one can grumble to one's self or to the boarding mistress who is paid to hear it, and not make five or six people suffer for one's own ignorance and criminal negligence.

It is not what we do but what we find pleasure in doing that makes or mars our days; hence if some one can devise a means of giving to the housewife an interest in the daily ordering of her household, that one will confer a benefit upon humanity. That was what Count Rumford essayed one hundred years ago.

Women must take their places as organizers and superintendents of the economic consumption of wealth, for when the household ceased to be a manufacturing centre it became a focus of consumption. The factory acquired an economic organization and employed not only day-laborers but highly paid superintendents. The house in losing its industrial importance has degenerated into an unorganized

dependency, and its detailed care has fallen into menial drudgery.

The later writers on economics are beginning to call attention to the misconception exemplified by this state of things, and to define the use of money in the household as productive consumption, and to show that supervision and organization are as valuable adjuncts of labor and as worthy of high esteem in this as in factory manufacturing.

Since the object of all endeavor to get wealth is to use it, and the use of the most of it is in connection with the home life, it is evident that the household and its management is the most important factor in national prosperity.

It is due to the blind conservatism of the average man that he has left so long the consideration of what became of the money he worked so hard to gain. Most of the economic theories and statistics have dealt with the incomes of the poor man where there was little choice, but the real test is with the class which corresponds to the plastic middle layer, the fermentable mass of humanity, out of which rises the cream of society or from which sink the dregs. A recent French writer is quoted by Bullock as stating that "The human race could increase its welfare almost as much by a better ordering of its consumption as by an increased production of wealth, and this without any real retrenchment in consumption."

And this "better ordering" means the wise management of the household, so that the satisfaction of the human wants as well as the animal needs shall be as complete as possible.

To obtain this result requires that the superintendent, the manager, shall be a person with a knowledge of the utilities of the various substances used, with a standard by which to measure the relative values of the commodities to the given family, and the strength of character to resist specious temptations to spend for that which is only temporarily gratifying and not permanently useful.

In no department of human activity would an application of the laws of economic utility be more productive of immediate gain than in the conduct of the household.

That the shrewd business man so long neglected this most important factor in social progress seems at first sight unaccountable, but it has been easier to earn than to give time and thought to wise spending of money. That he understands in a measure what is needed is seen in the economical management of large hotels and of ocean steamers, which give a better return for the money expended than does the average household of the same class of persons as those who patronize them. The single house seems to the expert in organization too small an affair upon which to expend his energies; for the same effort he can

supervise the comfort of one thousand persons. Hence the tendency to herd together lessens the value of the individual home, just as the cheaper production of the factory tended to kill the home manufacture. Individual establishments are going the same way, and only one thing will stop the march of events, and that is a belief in the greater value of the single family home in the production of men and women, and with this belief must come a recognition of the importance of the organization and management of the affairs of the single household.

In any manufacturing establishment the cost of production and distribution far outweighs the cost of the raw material; the economy of the great industrial combinations is in the administrative departments, just as in the economy of the large hotel over the small one.

If the expenditure in any given family is, for example, five thousand dollars a year, fully half this sum is due in salary to those who administer the other half, who keep the accounts, who study the markets, who spend time and strength in keeping informed as to the values and æsthetics of the articles purchased, and who give time to the carrying out of the plans thus formed.

If the man and woman share alike in the work, then twelve hundred dollars apiece should be considered a personal share to use upon personal needs and upon the higher social and ethical claims.

In the average family where the income is twenty-five hundred dollars, and the man gives no thought whatever to the expenditure of the household, then twelve hundred dollars should go to the woman to spend for these same needs as she chooses, provided she can satisfy the family with the rest, and prove an efficient manager.

If this principle of a responsible position were recognized as a fundamental one in twentieth-century housekeeping, we should hear no more of the interference of women in economic industries; we should see instruction in household management demanded in order that success might follow, as in any other position; and even if a competition arose with men who might prefer to keep the management in their own hands, it would soon settle itself, for most men prefer to earn a thousand dollars by hard work to attending to the careful details required to save a hundred dollars, while women take kindly to the regular systematic oversight which this home economics demands, if once they see the value of it.

Let once the dictum go forth that for every dollar spent in the material wants of the household there shall be a dollar put into the hands of the manager for higher purposes, and a revolution in living would result.

If my readers have had the patience to follow me thus far, I am sure they are asking who is to have the

knowledge and wisdom and time to carry out the ideals and keep the family up to these standards.

Who, indeed, but the woman, the mistress of the home, the one who chooses the household as her profession, not because she can have no other, not because she can in no other way support herself, but because she believes in the home as the means of educating and perfecting the ideal human being, the flower of the race for which we are all existing; because she believes that it is worth while to give her energy and skill to the service of her country and age.

The greatest disqualification for this position to-day is woman's lack of knowledge of and respect for science and the laws of nature.

Let her once acquire these and she will come into her kingdom. Let her once gain perfect control of her machinery, feel it yield under her hand, know her power, and we shall hear no more of domestic difficulties so great as to cause hundreds of housewives to turn their backs on home life and retreat into hotels and apartment houses.

The organizing ability which has won such signal success in the engineering world cannot all be confined to one sex; it has been developed by education, by contact with the world. Give women a chance to spend as wisely and economically as men have learned to manufacture and produce.

Give her an education in the laws which govern the processes of daily life, in chemistry, in physics, in biology, in mechanics, and then develop her taste in art and music as well as in literature. Teach the girls in school the principles of form and color and certain elementary economics of expenditure.

The present education of woman is not tending to fit her for this higher office of spending wisely the money earned by herself or any one else; dense ignorance of the fundamental principles of sanitary science prevails even among so-called educated women, those who should set an example.

That women have minds capable of grasping business principles is proved by the success of many in professional callings; but the majority have yet to learn what it means to subordinate the present to the future; they have yet to submit to the action of law.

As Mary Tillinghast expresses it: "I find that the stumbling-block to women is their unwillingness to go to the bottom of things. They shrink from paying the price of hard study."

The gradual displacement of women in various salaried positions in government and corporation offices is a sure proof of this failure on the part of the majority to accept strict business principles. This lack in character will not be remedied until education is brought to bear and science is made an essential

part of every woman's training, so that she may acquire a respect for science and for economic law.

Meanwhile let her serve in the home an apprenticeship which will make the further study easier and which will more sensibly advance the welfare of the community than any outside work can do.

Let her not grasp for the reins of business until she can master the running of one home.

That the household is held by popular opinion to be a place of menial service and petty, degrading duties and not the centre of all social impetus, of high and lofty ideals of health and happiness, is proved by the scant courtesy which home economics as a branch of woman's education receives. That the household is not run on economic principles is acknowledged by the neglect of it in the study of economics.

The woman's province is degraded by her own connivance, since knowledge is at her disposal and she does not avail herself of it. She persists, ostrich-like, in ignoring the movements in other departments of social life. She should make the home an expression of her individuality, but she has none to express. Neither will traditional education help her to adapt herself to others. Social training in ethical ideals and the inculcation of a belief that home-making must be the woman's profession for which she requires a power-giving knowledge, must become accepted factors in the education of every woman, rich or poor.

The term "managing woman" has been a reproach rather than an epithet to be sought for, but it was because the manner of the person rather than the management was offensive.

If the house-mother can so manage the finances of the family as to secure the safe rearing of a group of children with such refined but strong characters as will enable them to become capable, forceful men and women, why should she not have all praise?

What can pay better for the effort than this manufactory of brain and muscle power, the home?

The time has come for a radical change in methods. I have no hesitation in saying that no man is justified in giving over the housekeeping to a woman because she is a woman; that unless he is satisfied that she knows how to use money, or that she can learn, he should keep the accounts and pay the bills himself.

As I see the situation, the most pressing needs of to-day are:

1st. A knowledge of what it is essential to keep in the home. Must bread be made in the house? must the laundry work be retained?

2d. A knowledge of how much time is required to perform the various services demanded, with, of course, a certain allowance for the unexpected. How many rooms can a chambermaid put in order in an hour? This depends upon a comprehension of economic use of human power.

3d. A knowledge of the relative values of the goods consumed in the house and of the services demanded in causing this consumption.

If service must be economized, then the trifles on the bureau, the carved ornaments on the mantel-shelf must be put away in order to save the time of dusting. One course at meals must be sacrificed rather than the temper of the whole family be tried past endurance in the vain endeavor to make one pair of hands do the work of two.

4th. A comprehension of the inexorable laws of power and energy when the maid is required to answer the bell or the telephone once in five minutes, and go over two flights of stairs to do it; it often involves the same expenditure of energy as if she were required to climb rapidly a monument 2400 feet high.

There is still too much of the element of slavery in the work of the house, a disregard for the mechanical efficiency of the human machine.

I do not in the least blame young women for going into the factories, where their work is measured by law and not caprice.

5th. An acceptance of the fact that woman cannot emancipate herself from nature's laws, that she must inform herself in regard to them and accept their bondage, making for herself within limits a world of freedom, lies at the bottom of all household reform.

I am aware that some one will say, "But all the

poetry of life is destroyed by the insistence upon a cut-and-dried plan, and life will not be worth living if each day and hour must be accounted for." True, if the plan is allowed to show through its covering. A skeleton, unclothed, is not a thing of beauty, but does not detract from the grace and charm of the perfect body to which it is essential.

In the same way the skeleton of purpose and principle must underlie and define the well-ordered and truly delightful household life. Saving for its own sake is niggardly and hardening to the soul. Saving for a high and noble purpose raises the art to the level of heroic endeavor.

So much depends upon the point of view. The casual observer delights in the hectic bloom of the young consumptive, but the physician sees beyond the fair cheek to the deadly cause beneath and has no joy in the sight. The apparent freedom from care and tyranny of custom shown to a chance visitor by many a household conceals the canker of debt and disgrace which is sure, sooner or later, to be revealed.

The present disorganized condition of the household is only a phase which may pass as quickly as it has arisen. One generation has seen it develop, another may see it a matter of history. Men have been too busy subduing the obvious obstacles of nature to look under the surface of their daily life,

but the very fact that the problem of living is beginning to press home will stimulate them to the application of those scientific principles which have spanned continents, controlled rivers, and tunnelled mountains to the building of houses that may be lived in safely and economically. The art which has given fine churches and museums will decorate and beautify the homes. The outlook is full of hope and not of despair. The only need is knowledge (science) of what the demands are and a determination to meet them. The love of conquering obstacles has not died out of the Anglo-Saxon race.

The twentieth-century household demands of its managers, first of all, a scientific understanding of the sanitary requirements of a human habitation; second, a knowledge of the values, absolute and relative, of the various articles which are used in the house, including food; third, a system of account-keeping that shall make possible a close watch upon expenses; fourth, an ability to secure from others the best they have to give, and to maintain a high standard of honest work.

If the housewife cannot and will not apply herself to the problem, let her not stand longer in the way of progress as she is surely doing to-day.

APPENDIX.

TABLE SHOWING FAMILY EXPENSES FOR TWENTY YEARS, WITH PERCENTAGE FOR EACH ITEM—CENTS OMITTED.

	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Av.
Rent..... Per cent	*19*	*18*	*19*	*16*	*18*	*14*	*14*	*17*	*16*	*16*	*15*	.....	.....	.....	.....	.....	.....	.....	.....	.....	*16.5*
Cost....	$250	250	250	250	250	250	263	349	349	320	285	Lived in own house from this									
House-furnishing.....	*9*	*5*	*4*	*5*	*2*	*5*	*12*	*5*	*1*	*2*	*1*	*1*	*2*	*5*	*3*	*2*	*4*	*2*	*3*	*2*	*3.7*
Table.....	112	75	53	73	26	95	225	113	27	33	13	23	53	142	77	63	101	46	96	52	
	26	*22*	*20*	*24*	*26*	*24*	*20*	*21*	*21*	*20*	*18*	*18*	*18*	*17*	*19*	*19*	*19*	*20*	*19*	*15*	*20.6*
Service.....	335	305	345	374	357	428	381	449	444	407	346	398	424	448	468	465	515	551	555	479	
	.....	*9*	*11*	*9*	*4*	*7*	*8*	*7*	*8*	*6*	*4*	*4*	*4*	*6*	*9*	*9*	*10*	*9*	*8*	*7*	*7.3*
Heating.....	.....	128	144	143	55	129	154	154	117	117	68	82	87	166	223	209	268	252	240	225	
	.....	*3*	*3*	*3*	*3*	*3*	*4*	*3*	*7*	*1*	*3*	*4*	*4*	*4*	*4*	*3*	*3*	*2*	*3*	*3*	*3.3*
	.....	47	43	45	48	50	77	60	134	28	58	80	88	104	104	70	70	56	83	78	
	Stoves to 1885						Furnace from this on														
Lighting.....	.....	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*
	.....	8	10	10	7	8	8	20	17	11	7	20	15	16	17	17	23	25	21	19	
	Gas and oil from this on																				
Travel	*3*	*4*	*2*	*1*	*3*	*2*	*2*	*3*	*2*	*1*	*2*	*1*	*3*	*3*	*5*	*4*	*4*	*4*	*4*	*4*	*2.8*
Music and Reading.....	34	55	34	19	41	44	42	59	39	23	40	28	77	70	115	89	104	97	117	115	
	4	*1*	*1*	*2*	*2*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1.2*
Gifts.....	49	12	20	34	32	18	18	22	26	22	20	14	25	19	29	18	32	32	19	22	
	4	*1*	*4*	*2*	*2*	*3*	*2*	*2*	*3*	*2*	*3*	*2*	*4*	*5*	*3*	*6*	*4*	*4*	*3*	*2*	*3*
Church	56	19	50	27	35	54	32	33	67	31	57	36	92	141	62	155	103	105	78	55	
	4	*12*	*5*	*5*	*7*	*5*	*6*	*5*	*6*	*7*	*7*	*8*	*10*	*9*	*6*	*7*	*6*	*6*	*5*	*4*	*6.5*
Insurance.....	55	170	70	77	102	84	110	102	124	145	126	161	256	231	150	160	155	144	134	125	
	.....	*4*	*3*	*4*	*3*	*4*	*2*	*3*	*5*	*7*	*7*	*8*	*5*	*5*	*5*	*7*	*6*	*6*	*5*	*5*	*5*
Interest.....	.....	56	33	67	41	68	37	64	106	147	142	170	111	136	119	180	155	155	155	159	
	.....	.....	.....	*4*	*4*	*2*	*2*	*2*	*2*	*3*	*9*	*17*	*15*	*12*	*11*	*11*	*9*	*9*	*7*	*6*	*7.3*
Contingent.....	.....	...	.....	70	51	36	32	35	33	59	180	383	359	326	275	255	239	241	236	231	
	22	*8*	*10*	*12*	*9*	*18*	*12*	*8*	*7*	*9*	*9*	*14*	*14*	*6*	*6*	*4*	*4*	*4*	*7*	*8*	*9.5*
	293	113	131	194	123	321	231	166	144	180	184	309	346	155	122	107	95	156	212	259	

	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Av.
Blank, Mr.....Per cent	3	6	4	5	8	5	3	5	4	4	5	2	5	4	4	2	4	3	3	3	4
Cost....	36	75	57	78	112	81	55	95	75	90	87	34	129	104	82	70	95	88	75	63	
Blank, Mrs.....	4	4	5	5	5	3	4	3	4	5	3	4	4	4	4	4	2	6	2	3	4
Son.....	50	57	63	72	65	70	68	62	79	99	62	80	92	101	92	101	119	157	69	67	
	.....	2	1	2	3	2	2	3	3	2	2	3	2	2	2	4	5	5	6	12	3.3
Extras	.....	21	14	32	39	31	35	59	55	41	40	58	60	57	66	97	61	143	171	386	
	2	....	1																		
	33	....	4																		
Entertainment.....	.....	....	.....	....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Daughter.....	.....	....	.....	....	5	16	8	7	4	16	6	6	11	14	13	18	18	17	15	27	
	....	....	.....	....	....	1	1	1	1	2	1	2	2	2	2	2	2	3	3	3	2
Horse-keeping	.....	....	....	....	....	8	17	23	26	38	27	37	50	68	57	49	62	83	80	127	
	.....	....	....	....	....	....	3	7	7	7	7	9	....	....	....	....	....	....	....	....	7
Instruction	.....	....	....	....	..	....	55	154	148	131	124	208	....	....	....	....	....	....	....	....	
	.....	....	....	....	....	....	....	2	2	2	3	1	3	5	5	3	5	4	2	3	3
Doctor and Medicine	.....	....	....	....	....	....	....	33	33	41	48	32	82	133	88	60	124	96	58	44	
	.....	....	....	....	....	....	....	2	1	1	1	1	1	1	5	3	2	1	1	3	2
Taxes	.....	....	....	....	..	....	....	33	24	18	17	6	26	25	118	66	58	30	37	98	
	.....	....	....	....	....	....	....	....	....	....	....	....	....	4	4	4	4	4	4	4	4
Car-fares.....	.....	....	....	....	....	....	....	..	....	....	....	....	....	108	108	104	110	109	110	114	
	.....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	2	2	2	2	2	2
Water.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	38	55	44	55	58	52	47	
	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	1	1	1	1
Repairs.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	13	10	10	11	11	11	
	.....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	2	4	1	1	1	2
Improvement	.....	....	....	....	....	....	....	....	....	....	....	....	....	61	21	40	98	10	15	14	
	....	....	....	....	....	....	....	....	....	....	....	2	1	....	....	1	1	....	1	....	1
College.....	.....	....	....	....	....	....	....	....	....	....	....	49	19	1	....	9	38	....	24	....	
	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10	12	11
	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	292	362	
Total	$1307	1398	1328	1574	1397	1800	2123	2103	2125	2006	1945	2225	2413	2675	2485	2465	2776	2670	2967	3187	

FORM FOR RECORDING HOUSEHOLD EXPENDITURE FOR A FAMILY WITH INCOME OF $1000 TO $3000.

Number and age of persons stated, with other modifying conditions.

FOR PHYSICAL LIFE NOT MORE THAN 75% OF THE INCOME.

(Rent 15%-25%).						Running Expenses (10%-20%).		
House owned.			House rented.					
Interest on value			Rent			Fuel		
Taxes { house and land, water, street care			Taxes { water, street care			Light		
Insurance			Repairs not made by owner			Ice		
Repairs			Car-fare to and from work			Wages { regular service—cook, maid, etc.; occasional, e. g., putting in fuel, cleaning windows, sidewalks, etc.		
Car-fare to and from work						Express and freight		
If property value is changing, add or deduct annual gain or loss in value to find net cost of rent						Car-fares (occasional)		
						Stationery and postage		
						Telephone		
						Renovation, repairs, breakage		
						New furniture goes under investments if added to personal property. Put cost here when simply making good wear and tear.		

Clothing (10%-20%).	Food (25%).		Incidentals (5%-12%).
	Necessaries.	Luxuries.	
Necessary Adornment Concessions to claims of fashion	Raw materials ⅛ vacation expenses counted as food	Costly foods Wines Confectionery Food out of season Social entertainments	Gifts, Christmas, wedding, birthday, etc. Flowers Fees to specialists (largely fines for disobedience of nature's laws) Physician, medicine and nurse Dentist Oculist Barber, manicure, etc. Lawyer Travel for health Unclassified expenses

FOR INTELLECTUAL AND EMOTIONAL LIFE 25%, INCLUDING INVESTMENTS.

Religion (5%-10%).	Education.	Recreation (1%-5%).	
Church Charity	Schooling for children Books Periodicals Daily papers Pictures Bric-à-brac Instruments, music and lessons Lectures Societies	Athletics Theatre Concerts Travel ⅔ vacation expenses Clubs (social)	Real estate Stocks and bonds Savings Life insurance Furniture Table and bed-linen Kitchen utensils, etc. Other personal property

ADDITIONAL BUDGETS.

	Food.	Rent.	Operating Expenses.	Clothing.	Incidentals.	Higher Life. Savings. Charity, etc.
AVERAGE $3000 INCOME.						
Professor (Mass.), 2 children. The birth of a third and an accident to the father increased incidentals and lessened clothing	24.78	20.22	19.01	7.01	11.92	17.06
Young instructor (Mass.), 1 child.	23.30	House owned 25.96	17.10	16.66	5.88	11.10
Average of 5 families living in apartments in New York	35.00	20.00	8.00	10.00	.....	27.00
$2000 AND LESS INCOME.						
3 adults (Central N. Y.)	20.00	20.25	18.50	12.00	7.50	21.75
2 adults (Mass.)	20.40	18.00	12.60	12.50	5.8	31.40
Not given (Albany)	20.00	15.00	22.00	10.00	5.0	28.00
2 adults (Albany)	18.00 & op'g exp.	House owned 14.80	21.30	18.00	2.1	25.80
2 adults, 1 child born during the year (Albany)	32	15.00	with food	11.00	12.00	30.00

As bearing on some of the teachings of the book it will be noticed that the proportion devoted to the higher life has a tendency to decrease as the income rises; that is, the demands of social custom require an undue expenditure on externals.

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